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VICE AND ILLUSION

THE PSYCHOLOGY OF VICE

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IT is a pleasure to all of us to hold forth upon subjects about which we know very little. It is particularly a temptation to university professors to get away from the subjects of their own chairs and lecture as dogmatically as their nature demands on subjects of other people's chairs. That is why I am speaking to-night about Psychology. As to Vice, the case is a little different. Even if my own experience is regrettably limited, I have for some years studied the Chairman, and I bring my observations before a society full of persons whose range and profundity of knowledge will be sufficient to correct any hasty generalizations on my part.

What do I mean by "Vice"? Well, to start with, we observe as a matter of fact that, apart from actual crimes, or deep-seated wickedness, human life is constantly wrecked and ruined by three main bad habits: drink and drugs, sexual excesses, and gambling. What is the common element in these? A superficial analysis treats it as mere sensuality or pursuit of physical pleasure: that applies very little to any of them, and not at all to gambling. For example, if it were the mere physical pleasure of drinking that made the drunkard, we should expect to find the same effects from gluttony: to hear of young men who lost their employment and beat their wives owing to an inordinate love of cheese or roast grouse, which does not occur. People may ruin themselves, no doubt, through sloth or laziness, but only in a slow and negative way: it is failure rather than wreckage.

Consider some of the characteristic effects of drink or drugs upon behaviour. I knew a man, otherwise of good character, who drank and lost his job, more than once, through drinking. His friends

found other possible jobs for him, in which of course everything depended upon his making an impression of sobriety and general trustworthiness, at any rate at the beginning. We found that when he went up to be interviewed for the appointment he turned up drunk. Could he not have kept sober for that one day? Of course he could. But what happened on each occasion was the same. He wanted to make a good impression. He felt nervous. His courage ebbed. He took a drink to steady himself, and felt better, but not quite right. So he took more and more, and appeared at the interview helpless.

Take another case. There is a particular form of blindness produced by nicotine poisoning. A distinguished Scotch oculist once told me that when patients came to him suffering from the early symptoms of this malady, he would explain the situation to them and tell them that their only chance of keeping their sight was to give up smoking: if they continued to smoke they would go blind. Nearly all, he said, did continue to smoke and did go blind. Perhaps one out of ten succeeded in changing his habits. If one tries to guess at the psychological process in their minds, perhaps it was this. The thought of coming blindness was painful, worrying. The worry would be charmed away by a pipe; and one pipe could not make any difference to the disease.

There is something curious at work here. Something at any rate different from mere sensuality. It is not mere self-indulgence. There is an element of madness or delusion.

I remember—and this is the one lurid confession that I have to lay before the Institute this evening—one experience of my own with drugs. I had hay-fever badly, and had made it even worse by moving a lot of books which were full of dust, and kept me sneezing and running at the eyes all night. I had been recommended to squirt hazeline up my nostrils, and since this was painful, to dilute the hazeline with a 5 per cent solution of cocaine. So I took this remedy freely, and since my nostrils were particularly sensitive freely increased the proportion of cocaine. It was lovely! All pain went. All worry and depression, all sense of disappointment and fear of the future melted away. I was not exactly in high spirits, but I was in a sort of celestial calm. I scarcely thought, but such thoughts as I had were beautiful. In the course of the morning a visitor came in and talked to me. This I felt to be tiresome. I resented the effort of having to attend to what he said, especially since it did not and could not matter in the least. Whatever sounds or noises he might utter could not matter to me.

> It seemed that I was happy: that to me
> A livelier emerald twinkled in the grass,
> A deeper sapphire melted into the sea.

You will perhaps be disappointed to hear that, just about this point, it dawned on me that I was under the influence, and that my delightful hay-fever cure was open to objection. So I stopped it.

Nevertheless, that brief hour of illusion made me realize as never before the state of mind of the drug-addict or the drunkard. These things, while their effect lasts, transmute the world. That is why they are beyond price, irresistible. It is not that they give the victim pleasure: it is that, whereas without them he may have been poor, unsuccessful, disliked, ill-thought-of, contemptible, disappointed, after taking them he becomes a sort of celestial being, his illusions fulfilled, and his megalomania satisfied. They have made for him a new heaven and a new earth.

I am speaking of the psychological side of the experience. From the physical side there are other considerations to be borne in mind, particularly the effect of all these drugs, from alcohol and tobacco to cocaine and opium, in causing a craving for themselves. That raises other problems, which for the moment I leave aside.

It may be said that my explanation applies well enough to one particular group of vices, drugs and drink, but what about the others? I believe it applies to all of them, though not quite in the same degree.

In the case of sexual temptations there is no doubt a physical instinct and a strong natural desire concerned. This may easily become excessive. But I greatly doubt whether the mere excess of a natural instinct would by itself produce half the destruction which we now see produced. On the basis of the physical instinct there is reared an immense superstructure of illusion, of self-flattery, of mutual flattery, curiously like the illusion produced by drugs. Tolstoy says of the prostitute Maslova that she had great self-respect and self-admiration: she believed that she possessed certain qualities which were immensely in request. People praised her in extravagant language, and showed their sincerity by paying very high prices for the pleasure of her society. She lived in an atmosphere of illusion. On a reading party I was once thrown into the society of an undergraduate of my own age who was involved in continuous amatory intrigues. (He was sent down after his first year.) I remember that he had a passionate love-poem, with a space ingeniously left in the first line of each verse so that almost any reasonable female Christian name would suit the metre. And he made good use of it. He sometimes favoured me with his confidence, and I remember being struck by the same thought that I am trying to put before you now. He was possessed by a real passion; and that passion was not love, nor yet mere desire in a low physical sense. It was vanity, or self-adoration or megalomania; the wish to be assured that he was something unique and splendid, beyond the common run of human kind. I

remember his looking at himself in the glass and murmuring, "I am an ugly little devil, really. I wonder what it is they all see in me." But he knew in his heart, or rather he always wanted to be assured and re-assured, that the thing they all saw in him was the real man, the secret splendid truth, which then irradiated his world for him. It was this longing that made him so fickle. He had sported with Amaryllis, and Amaryllis had assured him ecstatically that he was a wonderful being. But then Amaryllis loved him; he had taken pains to make her do so; he would like another opinion, a disinterested opinion. If that were equally ecstatic he would be content. So he approached Euphemia.

Does the same explanation apply to gambling? I think it does, though obviously its physical basis is not a craving for sensual pleasure, but quite another element, the love of excitement and danger. I knew a man who is reported to have said that the greatest pleasure he knew was a cavalry charge, and the next greatest playing for a stake too high for him ever to pay. I doubt if most of us would enjoy either. But there is in the gambler a very strong element of day-dream. He sees himself rich. He puts in for the Melbourne Cup and imagines himself winning thirty thousand pounds at a blow, and doing all the wonderful things with it that he means to do. There is also, I suspect, a curious day-dream element making him think himself the favourite of Heaven, sure to win, or at least more likely to win than anyone else; making him believe that he has signs and hints vouchsafed to him, or else that he happens to possess —without much experience, it may be—one of the highest and most admirable of human qualities, a gift for spotting horses. The gambler, like the other persons we have analysed, has a vision of himself which he tries to realize by illusory methods.

This day-dream of self-adoration, this longing—by illegitimate and unreal paths—to feel the thrill of one's own splendour and greatness plays a large part in many other ways of behaviour which are not regularly labelled as vices: or rather, it selects as a root or base some natural animal instinct, and then clings to it like a parasite and puts forth a luxuriant growth. Notably it is so in sport. We start with the normal pleasure in killing its prey that belongs to the predatory beast. But then come refinements. There goes a bird high in the air, swift and beautiful and far above my pursuit. "Ah, that is what it thinks, is it? A touch of my finger and it falls bleeding and helpless, and acknowledging its master."

I knew a man who went to Iceland on purpose to shoot a Great Northern Diver. He wanted to shoot it because it was so beautiful a bird, and so rare, and had such a lovely deep bell-like cry. Mere rationalists would think that those were reasons for not killing it, and indeed for preventing anyone else from killing it; but the

average sportsman feels otherwise, and it is hard to explain his feeling except on some lines of self-glorification. Why is it more of a pleasure to shoot hundreds of live pigeons as they rise from a box than to shoot dummy pigeons tossed up by a spring? Because the latter is a mere proof of my skill; the former shows me as master of things, inflicting agony and death, with a curl of the finger. One observes that certain notorious megalomaniacs particularly enjoy hunting-parties in which hundreds and hundreds of animals, as fine and beautiful animals as possible, are driven past and killed, killed, killed as they pass. One of them, General Göring, as I see in the Press, has just erected a monument to himself as "the Meisterjäger of Germany from the wild beasts of Germany" in gratitude and admiration. I must thank him for so aptly illustrating my point.

Cruelty is frequently incidental to megalomania, but is of course different. I imagine Streicher and his followers do feel more and more proud of themselves as they see little Jewish girls in tears and Jewish writers unable to write because both their thumbs are broken. It is perhaps difficult to be quite sure that you are something splendid and superhuman in power unless you can instantly destroy those who have doubts on that subject; or, indeed, unless —whether anyone doubts you or not—unless you can kill people with a nod and inspire terror as you pass. That is why most megalomaniacs want to be conquerors. *Et qui nolunt occidere quenquam Posse volunt.* Though you may not want to kill anyone, you wish that you had the power to do so; and how can you be sure that you have the power unless you sometimes use it?

So far these vices which we have analysed seem to have had two elements in common: *first*, a more or less complete disregard of the wishes and welfare of other people. This is obvious. In the drug addict it is a complete unconsciousness of other people; in the type we have considered last it extends to positive and widespread cruelty. But this quality is common to most if not all forms of anti-social conduct; so we need not dwell upon it further. The *second* and more characteristic element is Illusion. All these vices aim at creating a high degree of what psychologists call "positive self-feeling": at rescuing the man from his troubles, anxieties, failures, humiliations and fears, and so transmuting his whole environment. The drugs make him serene and at peace with the world. The sexual conquests make him an admired and beloved being, unique among his fellows; the gambling habit makes him bold, adventurous, and rich: the slaughter of beasts and men, and all the various exercises of tyranny, make him feel that he is a great man, towering above the herd that trembles before him. And then, in all of them alike, this sweetness or pride or glory turns out to be only an illusion. Either it disappears, leaving nothing behind,

as with the drug addict who simply awakes from his dream into naked misery, or the gambler who finds himself ruined; else, without absolutely disappearing, it just turns to dust and ashes in his mouth. I have never seen this collapse of the cloud castles more vividly described than in an old Egyptian tale, which so fascinated me many years ago that I translated it. The Priest of Ptah, Setne, had committed a sin against the dead for which, it was prophesied, "His dreams would make him pay." One day he sees at Bubastis the most beautiful woman he had ever seen in his life, apparently a priestess of Pasht. He contrives to meet her. He finds her, more beautiful than ever, in a splendid palace on the verge of the desert in Per-bast, beyond the houses of the dead. She seems to love him, and he is wonderfully happy; but "she is no common woman," he must first sign a paper putting away his wife. He signs. Then, his present children must not be rivals to her future children. He must disown them. He does so. He is troubled, but she is more radiantly beautiful than ever. Then she needs more.

> "These children, knowing all to me thou art,
> Hate me. Let them be mine, to take apart
> And do my will upon them." And he said
> "Do all the abomination of thy heart."
>
> She slew them then and from her window fine
> Flung them. And far below he heard the whine
> Of dogs that tore, and curling cats of Bast
> Which lapped their blood. And Setne drank his wine.

Despair seizes him. He has lost everything: but—

> "Hast thou not me, she said, in place of all?
> Come therefore." And she led him through the hall
> To a fair couch, ebon and ivory.
> And down he lay and spread swift arms withal
>
> To clasp her. And within his arms outspread
> Sudden, she withered, withered: and her head,
> It had no eyes, and downward all her jaw
> Dropped, like the jaws of the uncared-for dead.
>
> And Setne strove to rise, but cloud on cloud
> Held him; hot wind and hate and laughter loud
> And one that wept for a world's glory gone,
> And dust, dust, dust. And Setne shrieked aloud;
>
> And saw, and lo, all naked in the day
> In a waste place of bricks and shards he lay,
> And clutched a burning kiln. And near him passed
> The way, and much folk jeering on the way.

I quote the passage for two reasons. It illustrates the element of illusion and disillusion which I have put forward as more responsible than mere sensuality for the damage caused by what we call Vices. And secondly, coming from the ancient world, it illustrates the intensity with which ancient thought fixed on Illusion, deception, Mâya, Atê, as the root of most evil. It is not we who have first seen this. The experience of the human race for thousands of years has felt the power, the seductiveness, the terrible destructive force of illusion, and seems to cry out to all who will listen that the Truth is hard, but it is only the Truth that saves. "Things are what they are, and their consequences will be what they will be. Why, then, should we seek to be deceived?"

Is that to be our conclusion? Bishop Butler's words are impressive. One would like to obey them and banish from our lives this infernal Siren of Illusion. But are they true? Did not Bishop Butler himself draw much of his influence from his acceptance of doctrines which very few people believe to be true? Do not almost all people accept the traditional religious beliefs of the country in which they happen to be born, Catholic, Protestant, Islamic, Hindu, Buddhist, or whatever it may be? Is it not logically demonstrable that all but one of these systems must be in large part illusory, and far from certain that there is no illusory element in the remaining one? Must we not admit that passionate faith, the faith that makes devotees and martyrs, whether to sect, nationality, or political party, comprises often and perhaps generally a large element of illusion? In many cases it leads to a kind of megalomania, such as we see in most revolutions and dictatorships; sometimes to a belief that the possessor is in intimate and almost confidential relations with the Most High. Carlyle has observed that when Cromwell differed from his Council, he generally referred the matter to God in earnest prayer, and that God always decided against the Council. We need not dwell on the obviously bad effects of this Illusion, its megalomania, arrogance, and intolerance, especially in religion. It has led to cruel persecutions and savage wars. Indeed, it has probably produced more hatred of man against man than any other cause, except the struggle for life itself. That is granted. But the problem that troubles us is that in a number of cases, religious or philosophical or civic, this element of Illusion which we were inclined to condemn so unreservedly, turns out to be good. The world would be a poorer place without it.

Let us consider what point we have reached. "Things are what they are, and their consequences will be what they will be. Why, then, should we seek to be deceived?" Why, indeed. The ancient philosophers all caution us against the power of illusion. Socrates,

as we know, took virtue to be identical with knowledge. You simply could not know that A was better than B, and yet prefer B. All vice was the result of false opinion. Euripides and others corrected this paradox. It is not through mere lack of knowledge that life is wrecked. Plenty of bad people have wits enough. It is because they do not hold out against temptation. They seek their own pleasure and forget τὸ καλόν. None the less, the Socratic view kept reappearing in the later philosophies. They all intellectualized their ethical problems, and were rather too anxious to prove that the wicked man was merely a deluded fool. Epicurus—rather like Norman Angell—thought all the main problems of life quite simple and obvious, if only men would not muddle themselves with artificial sophistries. Zeno identified Virtue with Wisdom (φρόνησις); the bad man was unwise, or, if you preferred so to phrase it, insane—the victim of delusions. Zeno did apparently admit that the passions were not exactly the same things as bad arguments, but the harm about them was that they "distorted the reason." The Neoplatonists go even further. They want to base themselves on absolute knowledge, naked truth, and the absence of all illusion.

This is all very well, but, as a matter of fact, when we read these philosophers and admire them and feel their greatness, it is not so much their intellectual exactitude that moves us; it is their burning faith, their obstinate and heroic self-deception. When Epicurus, dying of a very painful disease, manages to write a short letter to a friend explaining how happy his last days of life are, and how his bodily pains, which have now reached their extreme, are overcome by the pleasure of his thoughts and memories: when Zeno argues with fiery conviction that riches and poverty, pain and pleasure, health and sickness, are neither good nor bad, but matters of perfect indifference; it is difficult not to admit that they have reached that state of inspired Illusion which we associate with saints, mystics, fanatics, *id genus omne*, more than with disinterested seekers after truth. It is a case of Faith rather than Science.

This kind of illusion is not confined to religion and philosophy. William James has studied it not only in its religious manifestations, but in various details of ordinary life. We all remember his illustration of the man confronted with a chasm to jump which is just at the limit of his physical strength. If he faces the facts and loses heart he will probably fail; if he feels that God is with him and therefore he must succeed, there is a good chance that he will manage that jump. Virgil saw the point plainly enough: *Possunt quia posse videntur.*

What is this Illusion which forms so important an element in life? What did Balzac mean by the title of his book *Illusions Perdues*? Why is it, on the whole, a bad thing to be disillusioned? I

doubt if the phrase is an accurate one. I do not believe that the young man who still has his illusions does to a great extent entertain a number of false beliefs which the disillusioned man has tested and rejected in favour of true beliefs about the same subjects. I should suggest rather that the young man, being confronted by a very large and indefinite mass of ordeals or challenges, faces them with the courage and confidence that come from youth and high spirits, while the disillusioned man faces his challenges with the low spirits and lack of confidence which come from disappointment. No doubt some intellectual judgments are involved, a belief that "The governor is bound to give me a rise when I just tell him the facts," or, conversely, that "Only a fool would expect the governor to care whether I starve or not." A good many of these beliefs are mere emotions disguised in the form of intellectual judgements. But the intellectual beliefs are there. And if it is a bad thing to lose your illusions, if it is a good thing to have the sort of faith that moves mountains, it looks as if we were forced into a position extremely painful to any philosopher, that in certain fairly numerous cases it is better to be wrong than right, better to deceive ourselves than to face the truth.

Let us consider this painful conclusion a little further. First, we must keep distinct in our minds the moral qualities which lead to the illusion and the illusion itself. It is no answer to our problem to say: the courage of the martyr is good, but his intellectual mistake bad. Sometimes, of course, that is so. The courage of Ras Seyum's men makes them rush to destruction with swords and spears against artillery and aeroplanes. The courage is admirable, but the illusion which it produces deplorable. But in many cases the actual illusion, the false belief based on false information, seems to be good.

In ordinary practical life it is often considered better not to let a person know the whole truth. A patient with heart-disease is often deliberately deceived by his doctor on the ground that to know the truth would make the disease worse. A body of soldiers left in a desperate position may fight better and have a better chance of escape if they are cheered up by deliberate false information. I need hardly labour the point. It is only too freely and eagerly accepted. Consider in time of war how nearly all the Governments of the world lie like . . . like Governments.

I suspect that in all these cases where Illusion seems to be a good thing there are two elements which are of special importance. One is the weakness of human nature; weakness of intellect, or weakness of character, and weakness varying greatly from one individual to another in respect of particular crises. Some men are stimulated by danger, some paralysed. Some would yield to this or that temptation if they knew they had the chance of it. Some will face misfortune, but not the treachery of a friend. But there

is a second element constantly interwoven with this consideration of the weakness of human nature: viz., that in a great many of the cases concerned it is difficult or impossible to convey in proper proportion the whole truth. If moralists will often leave an obvious delusion uncorrected or will even enunciate an emphatic falsehood with a good object, they do so chiefly in religious or political matters. And their defenders will maintain that, owing to the complexities of the subject *plus* the weakness of human nature, the Illusion thus fostered is nearer to the truth than the wholesale breakdown of belief that would result from scrupulous truthfulness.

I notice a curious example in a book which I mention with all respect, Pym's *Psychology and the Christian Life*. Dr. Pym undertakes a somewhat hard task in reconciling Freud and the Thirty-nine Articles, but that is not my point. He is speaking of resistance to temptation or the conquering of bad habits. In the old days we were told to use our will and make a moral effort. The Greek philosophers always speak of man "conquering" his temptations or "being conquered" by them. And Christian teaching has followed them. But the modern psychologists tell us we must not make any struggle against temptation. If Will and Imagination are at strife, Imagination always wins. Dr. Pym boldly accepts this slippery result, and says, "Do not bother about your will or resistance to temptation. Do not even depend on your faith in God, and believe that faith will save you." "God will do it without any help from you." "God will use you as His instrument" (pp. 36, 37).

This is a very interesting development of the older defence of certain Illusions on the ground that Faith will move mountains, or *possunt quia posse videntur*. Dr. Pym sees that it is obviously no good telling a man that he ought to have faith. The thing is to make him have it. Consequently he takes the line of telling him with authority and emphasis that, whether he believes it or not, the thing which Dr. Pym wants him to believe is true. It is no good saying to the soldiers in the forlorn hope, "If you will only believe firmly that reinforcements are coming you will very likely get through." The proper method is for the commanding officer to come forward with a radiant smile and a bogus telephone message: "The enemy are surrounded; reinforcements of sixty thousand fresh troops will be with us in three hours." I remember a woman in Scotland who was an enthusiastic social worker in causes which often exposed her to hardship and even humiliation. She told my wife that, when she had had some severe disappointment, she would sit alone in the dark holding out her right hand, and that in course of time Jesus Christ came and pressed it and she felt new courage. Most of us would agree that this belief was an illusion, and, further, that it was best not to disturb it. And I think our agreement would be based on two grounds: first, that owing to various intellectual

weaknesses in her nature or her education, if we succeeded in convincing this woman that Jesus did not come and hold her hand, she would lose heart and—intellectually speaking—draw all sorts of wrong conclusions from the particular negative true proposition which we had drummed into her, so that her conception of the whole situation would be even further from the truth than before. A despairing attitude towards her problems would imply a number of intellectual beliefs which would on the whole be falser than those implied by a courageous attitude . . . provided, of course, that her general aim was a good one, and in accordance with facts.

If we try to distinguish the pursuit of illusion which constitutes vice, and the pursuit of illusion which produces social or religious or artistic enthusiasm, I do not feel clear what exact tests we can lay down; but I would suggest three:

1. The enthusiast gets to his illusion by means of a real effort at understanding his problems, or, at least, of meeting his challenges: he cares intensely, he ponders deeply, and, though the motives and influences working on him may be greatly mixed, the illusion which results is a *bona fide* result of mental and moral effort. The drug addict, or drunkard—or those about me who, according to Tolstoy, are trying to drown their consciences by the use of tobacco—are seeking the illusion itself, or at any rate finding it by some merely mechanical and non-rational method, and not through an unsuccessful effort at understanding something too hard for them.

2. The illusions which accompany Vices, and which are to a great extent the end and aim of the vicious practice, are just those from which, for good social conduct, we ought to keep free. We all start life by excessive selfishness, excessive self-esteem. To a baby, so I am told by experts, his own desires and satisfactions constitute the whole world; it is that Illusion from which experience and moral effort gradually and imperfectly emancipate us. Drink, drugs, sensuality, gambling, cruelty, all bring us back towards the complete anti-social selfishness of the baby. The illusions of the enthusiast, though sometimes pernicious, practically always have the supposed welfare of others somewhere near the centre of the picture.

I am not sure whether we ought to add a third distinction. The Illusions that accompany Vice are not only particularly baseless—some of the good Illusions seem baseless enough—but they are, just because they put the subject into an anti-social attitude—particularly subject to rude awakenings. Like Setne, the drunkard or drug addict or gambler, when his dream is broken, does feel that dust, dust, dust is all about him, the world's glory gone, and much folk jeering on the road.

However, it seems clear that Virtue has its illusions as well as Vice. Think of what we call Nursery Morality with its highly simplified and specialized rules: that you must not be rude, not be dis-

obedient, not bolt your food, not quarrel, etc.; its illusory picture of a world, in which Those who are good are happy, in which all grown-ups, and especially father and mother, are always good. (I leave aside for the moment the reflection that experience often brings to elderly people, that after all Nursery Morality was in practice pretty correct, and nearer truth than that of the fashionable novelist.) Apart from that, is not the real justification of this Illusory Picture of the world the fact that the child, for whom it is meant, is not capable of anything like a complete and exact picture of the real world—none of us are—and this illusory picture has been found by the traditional wisdom of many generations of nurses to be the sort of picture that conduces to the well-being of the nursery world? I suspect that the normal virtuous conception of life, as entertained and expounded by clergymen, schoolmasters, and well-behaved persons generally, is something similar to this nursery picture, and can be justified on exactly the same grounds. We must have some general working hypothesis. We have neither the opportunities nor the intellectual power to form a strictly adequate conception of the world or the problems of human life, and consequently we most of us accept a traditional conception: we think what the wisdom, duly mixed with folly, of our ancestors has considered it good for us to think, and has found on the whole to be conducive to human welfare. That is the normal basis, perhaps the only possible basis, for our attitude to life. The rough-and-ready picture of the world and its problems, as preached in the nursery or the churches or the law courts, aims at practical service rather than philosophic truth. Then in practice it is brought up with a clash against the real world, and something has to be done. Stupid people do not see the clash. Bad people drop the difficult or idealist parts of the tradition, and accept convenient alternatives. Victims of vice, being out of touch with their social environment, plunge into self-glorifying Illusions. Enthusiasts and fanatics, when contradicted by facts, try by force of will and emotion to deny the facts or change them. They may or may not succeed. But we who would be philosophers and men of science are bound by a special allegiance. We must put Truth always first and not second; and wherever it can be ascertained, base our lives upon it. In the immense uncharted region where exact truth is unattainable and men guide themselves mostly by approximations and metaphors, we must be on our guard against our own undetected illusions, and knowing that we cannot escape from them altogether, at least try to make sure that they do not deaden our consciences or our common sense. Let us seek Truth, as much Truth as we can find; let us at least never betray it; but Truth itself compels us to recognize that in the end of the account MAGNA EST ILLUSIO ET PREVALABIT.

GREAT THINKERS

(VIII) SPINOZA

Professor W. G. de BURGH

I

The student of Spinoza is faced by a peculiar difficulty. On opening the *Ethics*—Spinoza's chief work, completed for publication shortly before his death in 1674—he finds a system of metaphysics set forth in geometrical form, starting from definitions, axioms, and postulates, and advancing synthetically from first principles to a detailed interpretation of the universe. The difficulty lies not in the language—Spinoza's Latin is easy to construe, and there are translations—nor in the lack of literary graces; his style indeed is singularly impressive in its austere dignity. It lies rather in this, that the method of exposition conveys a misleading suggestion of dogmatism and finality, and conceals almost all traces of the patient inquiries that issued in the finished structure. If once the principles of the system are admitted, the rest appears to follow by logical necessity. But by what processes of thought was Spinoza led to those principles? This is the problem that besets the reader: in order to understand the *Ethics*, he must penetrate behind the text of the propositions to their significance as answers to the questions that were stirring in Spinoza's mind. And here, for all the light thrown by earlier writings—especially the *Short Treatise on God, Man, and his Well-being* (1656–1660) and the fragment on *The Improvement of the Intellect* (1661–1662)—and by the researches of modern scholars, much is still left for conjectural interpretation. Why, then, did Spinoza adopt the geometrical method of exposition? Certainly he shared Descartes's belief that mathematics furnished the model of demonstrative reasoning for all branches of knowledge. That he did not, however, regard the method as an infallible guarantee is evidenced by the fact that already, in 1663, he had presented Descartes's philosophy in geometrical form, while holding many of its doctrines to be erroneous. Spinoza's motive lay rather in his passionate desire to present the order of the world and the nature of man in their timeless reality, independently of human purposes and interests. He set himself to rid metaphysics of anthropomorphism, in face not only of popular theology, Jewish and Christian, but of the then dominant philosophy of Descartes. Descartes, while excluding final causes from the science of physical nature, held that the divine purposes in

creation lay beyond the grasp of the human mind. In Spinoza's eyes, to credit God with purposes while pronouncing those purposes unknowable was to take refuge in an *asylum ignorantiae*. "The human mind," he declares, "has adequate knowledge of the eternal and infinite essence of God." God, thus truly known, is known as a being who unfolds His eternal nature in the structure of the universe with a necessity that leaves no place for determination by all-too-human preferences. Ends and means, goods and evils, are relative to man's imperfect apprehension under the form of time. Man fondly imagines himself as exercising an *imperium in imperio*, independently of God, but this imagination is devoid of truth. Spinoza will show him as he really is, interpreting his nature and passions impersonally "as though it were a question of lines, planes, or bodies." He chose the geometrical order of presentment, as excluding any appeal to teleology and as reflecting, more nearly than any other form of reasoning, the timeless perfection of the real.

Apart from this formal obstacle, there is, of course, the graver difficulty, attendant on the study of all great thinkers, of grasping the meaning of Spinoza's main doctrines. They are hard to conceive in thought; harder still to interpret without prolonged discussion. Such are the notions of God's indivisible extension, of His infinity of Attributes, of His eternity in relation to its inadequate expression under the forms of duration and time, of finite individuals as the diversifications of His unique and all-embracing individuality. Consider, for example, one of the most perplexing of Spinoza's doctrines, the two-fold reference of the term *idea*. This will serve as an introduction to his views on two important problems, the nature of knowledge and the relation between body and mind. For Spinoza, an idea is not, as it was for Descartes, an object passively apprehended by the mind, but an act of judgment, involving affirmation of its content; an idea that is adequate or true is the criterion of its own truth. "As light makes manifest both itself and darkness, so truth is the norm both of itself and of what is false" (II, 43 S).[1] Moreover, each idea is the mental side of an act of the body, the bodily act and the mental being distinct aspects of a single mode of the one infinite substance, God. They are not two modes, of body and mind respectively, standing in a one—one relationship, but a single mode, reflected now in God's essential Attribute of extension, now in His essential Attribute of Thought, as a single point is situated both on the convex and on the concave of a curve. Here we have Spinoza's answer to the mind-body problem, which had been left in a precarious position by Descartes and his immediate successors. Spinoza recognizes the real dis-

[1] All references in the text, unless otherwise specified, are to the *Ethics*. S refers to the Scholium, C to the Corollary, appended to a given proposition.

tinction and transcends it. He escapes, on the one hand, from the difficulties of causal interaction, on the other, from the Cartesian dualism of substances and the absurdities of Occasionalism. But in his use of the term *idea* there is a further reference to the body which is far harder to understand. Spinoza maintains that the knower's body is not merely the extended side of his act of thought; it is also the *ideatum* or object known. Paul's mind, we are told, is the idea *of* Paul's body; when Paul thinks of Peter, his idea of Peter "indicates rather the constitution of Paul's body than the nature of Peter" (II, 17 S). What meaning are we to attach to this doctrine? In what sense can it be true that, when I look at or conceive a fellow creature, I am looking at or conceiving my own organism? Now Spinoza certainly cannot be charged with the crudities of Representative Perception. Nor is he simply stating, what all thinkers of his age took for granted, that in sense-awareness what is perceived is infected with qualities, e.g. of sound, colour, or taste, that are relative to the percipient. For the doctrine in question holds, not only on the level of sense-perception, but on that of clear and distinct thought. Spinoza means that the finite human mind knows its object, not in its full truth as God knows it, but from the angle, so to speak, of a fragment of God's being; and, further, that this stamp of finitude is set on the whole content of what is known. My mind and my body, when rightly understood, do not form a self-contained entity, "cut off by a hatchet" from the minds and bodies of other individuals, as seems to the inadequate picture-thinking of sense. They form indeed a real individual, but as a unique mode of God's whole thinking and extended nature; so that to know them truly implies knowledge of their context, inclusive of all other minds and bodies in the universe. As Professor Hallett has put it, the statement that the mind knows only its own body means that it knows its body as responding more or less adequately to Nature as a whole. But this view that Paul, in knowing *any* body, be it Peter's or Paul's own, knows it and the whole world of body from the angle of the knowing subject, so that what he knows reflects his own nature rather than that of the object known, does not mean that the human mind can never grasp the truth. It means only that it can never grasp the truth in its infinite fulness as it is known by God. Of course, since God is all in all things, my true thinking is the act of God thinking in me. But God thinking in a finite mind is one thing, God thinking as God, another. Spinoza draws a clear distinction between God's thought *quatenus infinitus est* and His thought *quatenus constituit essentiam humanae mentis*. In the one case He thinks the universe, so to speak, from all angles at once, *uno intuitu*; in the other, from the angle of an individual human mind. It is in the latter sense that Paul's knowledge of Peter

can be said to express Paul's nature rather than Peter's, or—since the body is, directly or indirectly, the object (*ideatum*) of every thought—to express the nature of Paul's body rather than that of Peter's. This theory of knowledge is doubtless open to criticism; the brief summary we have given will at least convince the reader that the study of Spinoza is no easy task.

Yet, for all its difficulty, Spinoza's philosophy promises a rich reward to those who have the patience to understand it. To him, as to the thinkers of ancient Greece, philosophy was before all else a way of life. Again, like the prophets of his own race, he has a message to proclaim, of salvation for the human soul. He called his great work the *Ethics*, to show clearly that the metaphysical construction in the First Part, and the dispassionate analysis of man's knowledge and emotional nature in the Second and Third Parts, were but the preparation for the doctrine of the mind's liberation from bondage unfolded in Parts IV and V. From his youth up, Spinoza's heart had been athirst for the living God. In the opening pages of his treatise on method, he lifts for a moment the curtain that veils his spiritual history, to tell how in early manhood he had reviewed the various ends that men desire—wealth, honour, and bodily pleasures—to discover in them but vain and transitory sources of distraction; and how his search had led him to the conviction that only in the love of an eternal and infinite reality could the soul find abiding joy and rest. "Happiness and misery," he writes, "lie wholly in this alone, in the nature of the object on which we fix our love." It is the doctrine, elaborated in the *Ethics*, that knowledge is impotent, unless it stirs desire. From the love of perishable objects spring strife, sorrow, envy, fear, hatred, evil passions that perturb the mind. "But love towards eternal and infinite substance (*erga rem aeternam et infinitam*) feeds the mind with pure delight, and is wholly free from every taint of sorrow; herein must lie the supreme goal of our desire, to be sought with all our strength." And he goes on to tell how this saving experience, vouchsafed at first in rare moments of insight, became with effort habitual and dominant. It is a love, be it understood, that has its source in knowledge. Spinoza's way of salvation, like Plato's, is the way of intellect. The beatific vision comes only as the crown of prolonged scientific thinking. Like Plato, he realized that it was impossible for the multitude to be philosophical. His message is for those who have ears to hear. There is something in Spinoza of the intellectual aristocrat, looking down from a far height on the vulgar follies of mankind, with pity not unmixed with scorn. This is what parts the spirit of Spinoza from that of Christianity. He was profoundly religious; but his religion was that of the intellect: alike in his life and in his doctrine, he was a saint of rationalism.

II

It is the doctrine that matters. Our interest in Spinoza's life is limited to the growth of his philosophy. Born at Amsterdam in 1632, into a colony of Jewish refugees from Spain, he lived peaceably under the tolerant rule of the Dutch Republic, and died of consumption at the Hague in 1674. He earned his livelihood as a polisher of lenses, refusing all offers of academic or monetary assistance rather than compromise his independence. Though a contemplative by temper and habit, he was no recluse; his letters show him associating genially with a large circle both of intellectuals and of men of affairs. His friends recognized in him a nature of rare purity of intention and firmness of purpose, wholly indifferent to worldly gain or glory, one whose evenness of spirit was unmoved by temporal vicissitudes and inspired by a single-minded devotion to things eternal. Spinoza's thoughts on these eternal things were the fruit of his own reflection; none of the influences that helped to their development impaired their marked originality. Of these influences, the chief were the Jewish Platonist tradition and the philosophy of Descartes. Nurtured in the religious inheritance of his race, Spinoza became at an early age an accomplished Hebrew scholar and, as was evidenced after by the *Tractatus Theologico-Politicus* (1670), an acute precursor of the higher criticism of the Old Testament. It is not surprising that his intellectual daring and fearless integrity roused suspicion among the orthodox, leading to his excommunication by the Amsterdam synagogue in 1656. The legacy of Jewish medieval Platonism which had been transmitted to thinkers and poets of the Renaissance left a deep mark upon his mature philosophy. The doctrines of the emanation of all things from the One, the primal source of being and perfection; of the necessary law whereby the products of its inexhaustible energy are generated unilaterally, without derogation to its absolute self-dependence; of freedom as consisting in this absolute self-dependence; of evil as negativity, i.e. as deficiency of reality in the parts of the universe when torn from their context in the perfect whole; of time as the broken light of eternity for man's finite apprehension; of the restoration of the soul by the way of knowledge to union with the One in intellectual love;—all these were fragments of the great Neo-Platonic tradition, bequeathed to Spinoza by the Jewish thinkers of the Middle Ages. Nor was he unfamiliar with Christian medieval thought. We find him in 1662 instructing a pupil in scholastic metaphysics and Cartesian physics. The second main influence on the growth of Spinoza's philosophy was Descartes. Descartes, too, as M. Gilson has fully shown, drew largely on the storehouse of his medieval precursors,

and, as a mathematician, was naturally on the side of the Platonists against the Aristotelians. But it is a grave error to label Spinoza a Cartesian; as we have said, he was *nullo addictus magistro,* and his divergences from Descartes are as striking as his obligations. Broadly speaking, he accepted the Cartesian physics in principle, while rejecting many of its details; in metaphysics and theory of knowledge he took over from Descartes the real distinction of thought and extension, of mind and body, the criterion of clear and distinct conception, the inadequacy of sense apprehension in comparison with conceptual truth, and the category of Substance and Mode as the key to the structure of reality. His chief divergences from Descartes may be summarized as follows. (1) His thoroughgoing Monism. Rejecting the doctrine of discrete concepts, each of which is just itself and not another, and therewith the dualism of distinct substances, body and mind, Spinoza affirmed one infinite and self-dependent Substance, God, who alone is conceived with perfect clarity and truth; thought and extension being interpreted as Attributes of the one and only Substance. (2) His insistence on God's immanent causality. For the transcendent Creator, whom Descartes, in common with Jewish and Christian theologians, held to have brought a contingent world into being *ex nihilo* by a fiat of will, Spinoza substituted a God causally immanent in the effects which flow timelessly from His being with the same necessity as do the properties of a geometrical figure from its essence. (3) His consequent exclusion of all contingency from Nature and of all freedom of choice from the sphere of human action. (4) The ascription to God of extension as an essential Attribute. (5) The doctrine that all modal being is eternal in God and the relegation of time from the status of a determinant factor in the universe to that of an appearance (*auxilium imaginationis*) relative to man's inadequate apprehension by way of sense. As we have already pointed out, Spinoza never dallied with the Cartesian theory of Representative Perception.

Other influences on Spinoza's thought were secondary and incidental; e.g. of Bacon, in the field of logical method, and of Hobbes, in that of political theory. To the last-mentioned subject he devoted much attention; as is witnessed by the *Tractatus Theologico-Politicus* and the unfinished *Tractatus Politicus*. We cannot dwell on these speculations in this article, but will confine ourselves to the *Ethics*, and therein (A) to Spinoza's metaphysic of reality and (B) to its application to the moral life of man.

III

(A) "Whatever is is in God, and without God nothing can be or be conceived" (I, 15). For, whatever is must be either Substance or

a Mode of Substance, i.e. it must be either self-dependent in being and conception or dependent for its being on Substance, through which also it is conceived (I, Deff. 3, 5, Ax. 1). Spinoza, as we have said, regarded with Descartes this distinction as ultimate; in other words, he regarded the logical relation of Subject and Predicate as expressing the structure of reality. To question this assumption is to question the very basis of Spinoza's metaphysics. Further, there can be only one Substance, which must be infinite. Were it limited, it would cease to be self-dependent, i.e. it would be no longer Substance. Were there more than one infinite Substance, the natures of each would overlap, infecting both with finitude. Spinoza is thus committed at the outset to a monistic philosophy. The one infinite Substance he calls God, or, less frequently, Nature (*Deus sive Natura*). This Absolute being is a self-conscious (and extended) individual; though the term "person" is rejected as anthropomorphic, he is able to be known and loved by men, and to reciprocate men's knowledge and love. "The (human) mind's intellectual love towards God is a part of the infinite love, wherewith God loves Himself. . . . Hence it follows that God, in so far as He loves Himself, loves men, and consequently that God's love towards men and the mind's intellectual love towards God are one and the same" (V, 36 and C.).

God, the infinite Substance, is defined as "consisting of infinite Attributes, each of which expresses His eternal and infinite essence" (I, Def. 6). The Attributes, therefore, belong to God essentially, each of them expressing a distinct character of His being and covering, so to speak, His whole being under that character. There is nothing in God that is not thinking, nothing that is not extended; but His thinking is not His extension, nor is His extension His thought. We may recall the analogy of the convex and the concave aspects of the curve. Diversity thus enters into the essence of Substance, which is as really many—infinitely many—as it is one. Of the infinite Attributes, expressing the inexhaustible richness of God's being, two only, extension and thought, are known to man. Descartes's created substances, *res extensa* and *res cogitans*, are thus dethroned from substantiality. It must be remembered that the extension ascribed by Spinoza to God is infinite and indivisible, differing radically from the spatiality of material objects. Lastly, though man knows God through only two of His Attributes, all are intrinsically knowable; there is nothing in God's essence that is opaque to mind. God knows Himself in *all* his Attributes. For Spinoza, as for Plato, what is most real is most knowable and what is most knowable is most real.

From God's essential nature, i.e. from His Attributes, flow the dependent Modes, or, rather, the system of Modes as reflected in each Attribute. God is essentially active in self-maintenance

and self-expression, overflowing of His infinite plenitude of being in infinite productive energy. To God as timelessly productive (the Attributes) Spinoza applies the scholastic term *Natura Naturans*; to God as the timeless effects of His productivity (the Modes) the term *Natura Naturata*. "From the necessity of the divine nature infinite things must follow in infinite ways, i.e. everything that can fall under infinite intellect" (I, 16). In God all possibilities are actualized; "He lacked not matter for creating everything, from the highest to the lowest grade of perfection; or, speaking more strictly, the laws of Nature herself were so ample as to suffice for the production of all that can fall under any infinite intellect" (I, App.). Everything in *Natura Naturata* is necessary; there is no place for contingency or purposive selection. God indeed is free, for He exists solely by the necessity of His own nature, and His actions are determined by Himself alone (I, Def. 7). But His freedom is poles removed from freedom of choice. It lies in His self-causality. Spinoza's favourite analogy of the logical necessity with which geometrical properties follow from the definition of the figure is manifestly inadequate to express this dynamic productivity of God. Its core of truth is the timelessness of both processes. Spinoza's terminology must not mislead us; when he speaks of cause, he means ground or reason (*causa seu ratio*), using the word to enforce the paradox that not only the essences of all things but their existence is the eternal effect of God's agency, in whom essence and existence are one. It is in this sense that he speaks of God as the efficient cause of His modes (I, 16 C). Moreover, the modal effects are themselves God. Whence else could they derive their being? Thus God is the immanent, not the transient, cause of all things (I, 18). Here too we must be on our guard. God is not a transient cause after the manner of Descartes's Creator, who brings the world into existence as something other than, and contingent to, Himself. But to reject external transience is not to proclaim a doctrine of sheer immanence. The neo-Platonic synthesis of immanence and transcendence comes much closer to Spinoza's meaning. Plotinus and Proclus, too, held that all things are in the One and draw their being necessarily from its nature. They too rejected contingency and volitional creation, while upholding unilateral causality and, therewith, the transcendence of the One. So for Spinoza the modal effects (*natura naturata*) depend upon the cause (*natura naturans*), but not conversely. God as cause is *in se*; they are *in alio* (I, Def. 1); "Substance is prior by nature to its affections," i.e. to its modes (I, 1). If we would consider Substance "truly," we must leave its affections aside and know it in the purity of its self-dependence (I, 5). Only when thus conceived does God reveal Himself in the concrete fullness of His individuality.

Of this self-revelation more presently; we pass to the modal systems of *Natura Naturata*. Each mode of God, existing timelessly within each of His infinite Attributes, is, within each Attribute, a fragment of an infinite modal system. We have seen that it is one and the same mode that is reflected coincidently in all the Attributes. Spinoza's position therefore is not that of psycho-physical parallelism. Nor does it allow of inter-action. For, since each Attribute is self-contained, having nothing in common with any other, modes of the Attribute of thought are to be explained wholly in terms of that modal system, without reference to their *ideata* in the modal system of extension. We saw, too, that the relation between the several modes is not external but intrinsic, so that adequate knowledge of a given mind or body involves knowledge of the whole system of minds or bodies with which it is integrated. Further, the modes under each Attribute form a hierarchical order. From the Attribute, we are told, there follows directly an "immediate infinite and eternal mode," and from this a "mediate infinite and eternal mode"; both these infinite modes covering the whole modal system. Thus, from the Attribute of Extension, there flow, immediately, "motion and rest," and, mediated by this mode, "the structure (*facies*) of the universe in its entirety" (see Ep. 32, to Oldenburg). Finite modes are individual wholes, constituting subordinate differentiations within these primary and all-pervasive entities. Similarly, within the modal system of Ideas. Spinoza's theory is doubtless very difficult, nor is it set forth with the detail that we would desire; but the principle at least is clear, that there are grades of perfection or reality, exhibited both in the relation of *Natura Naturans* to *Natura Naturata*, and, with richer complexity, within *Natura Naturata* itself. Spinoza frankly confesses that the terms "whole" and "part" are inadequate to express this relationship. He conceives extended Nature as an individual, mirrored, alike in its wholeness and in its individuality, in the hierarchy of its constituent members; and likewise, God's infinite thought as mirrored in finite minds and thoughts, each of which possesses individuality in the measure of its wholeness. For the structure of the modal system in one Attribute is identical with the modal structure in every other. *Ordo et connexio idearum idem est ac ordo et connexio rerum*" (II, 7). It follows that not only the human body, but all bodies, have their mind-aspect: *Omnia, quamvis diversis gradibus, animata sunt* (II, 13 S). The modes of thought, however, possess the peculiarity of self-consciousness and have themselves, as well as the knower's body, for their object. To know, says Spinoza, is to know that we know, and so forth; i.e. an *idea*, which is the act of knowing the body as its *ideatum*, becomes in that very act an *ideatum* to itself.

A further question presses on us in regard to Spinoza's theory of

Natura Naturata. We have been speaking hitherto of the modes of God, infinite and finite, in their timeless reality. What, then, about the world as it comes to us in sense-experience, as a series of events in time? What, for Spinoza, is the status of the "world of presentation," of what he terms the "common order of Nature"? We must confine ourselves to a dogmatic statement of what seems to be Spinoza's view. The spatio-temporal world, as we perceive it, is no mere illusion. The image of the sun as at 200 feet distance is true as far as it goes; we do actually see thus, and, when we know the fuller truth of science, we understand that, given the conditions, the image cannot be otherwise. Error arises only when we judge that the sun is really at that pictured distance. In view of Spinoza's doctrine that an idea is always an act of judgment, the error is not easy to explain. The world of presentation, though real in its measure, carries us but a very little way towards the truth it claims to represent. It is a fragment, apprehended in detachment from its context, arbitrarily isolated from the system of which it forms a part. Time is a form of this imperfect apprehension. Think out the system of *Natura Naturata,* and the semblance of time will be transcended in knowledge of the timeless reality. It is a basic assumption of Spinoza's metaphysic that eternity must needs manifest itself, for man's inadequate apprehension, under the form of temporal duration. How this is so, he is avowedly unable to explain; that it is so, is to be accepted as certain truth. To give a full *rationale* of experience is possible only for the infinite intellect of God.

IV

In the knowledge of God's eternal perfection and of his own reality as an eternal mode of God, lies man's salvation. That individuality consists in eternity is the central thought of Spinoza's *Ethics.* "In God there is given of necessity an idea, which expresses the essence of this and of that human body under the form of eternity" (V, 22). There is no thought here of Pantheistic absorption; in the experience of union with God a man realizes his full individuality. In the experience he is, and knows himself to be, eternal; not everlasting, nor immortal, for eternity excludes any thought of temporal duration. We have noted that man attains this goal by way of knowledge. All other forms of conscious experience—emotion, desire, volition—depend on the adequacy or inadequacy of intellectual apprehension. *Theôria* entails *praxis*; rather, it is itself *praxis,* for to have an idea is already an act of self-realization. "Our mind is partly active, partly passive; in so far as it has adequate ideas, it is of necessity active, and in so far as it has inadequate ideas, it is of necessity passive." "The mind's actions arise solely from its

adequate ideas; but its passions depend solely on its inadequate ideas" (III, 1 and 3). In this activity of self-knowledge and self-maintenance, man finds liberation from bondage and achieves virtue and felicity.

The conditions of this spiritual pilgrimage and the steps in its accomplishment are described in Parts III, IV, and V of the *Ethics*. We see men at the start, like Plato's prisoners in the cave, shackled in a land of shadows, and impotent to rid themselves of the bonds of circumstance and passion. How a being who, though deficient in reality, is yet a mode of God's eternal perfection, can be thus victimized by error; and how, if once so placed, he can ever enter upon the path of liberation—are problems wellnigh insoluble within the bounds of Spinoza's system. But, assuming the possibility, let us note the stages of the process by which inadequate knowledge is transmuted into adequate, and therewith slavery to passion into the active emotion of love towards God. "An emotion," Spinoza tells us, "cannot be controlled or removed save by a contrary emotion stronger than that which is to be controlled" (IV, 7). Knowledge does not suffice of itself; its liberating efficacy is due to its emotional correlate. When we know a passion for what it truly is, a necessary link in the order of nature, it ceases to be a passion and is transformed into the contrary active emotion. A, for example, hates B as the apparent cause of his diminished vitality or pain; but the knowledge that B's act was a necessary moment in the eternal order dissolves the hatred by arousing the contrary sense of heightened being together with the idea of God as its cause, i.e. an active emotion of love to God. "That emotion which is a passion ceases to be a passion, as soon as we form a clear and distinct idea thereof" (V, 3). In comprehending a present sorrow as in truth God's timeless decree, it ceases to afflict us; we are purged of vain regret and find rest in sharing in the divine love. *E la sua voluntate è nostra pace.*

Spinoza distinguishes three grades of knowledge, carrying with them three grades of moral progress. There is, first, the grade of *Imaginatio*, from which all men start, covering the whole field of sense-experience. On this initial plane, the mind apprehends itself and the surrounding world as an aggregate of events in time, in an unending chain of local and temporal conjunction, forming "the common order of nature." Empirical inductions and class-concepts, as well as table-talk and hearsay, fall within its scope; the "idols" of Bacon's *Novum Organum* were undoubtedly present to Spinoza's mind. Time, Number, and Measure are its distinctive instruments (*auxilia imaginationis*). Though, as we have noted, the knowledge it yields is not necessarily false, it is riddled with subjectivity, the product of psychological association and chance coincidence. The mind is at the mercy of whatever happens to affect

the body at the moment and of the traces left by prior affections upon the organism. The ethical correlate of this kind of knowledge is a life swayed by fitful gusts of passion, without principle or rational control, the life of Plato's "democratic" soul, which is "everything by starts and nothing long," or, at the worst, of the "tyrannical soul," enslaved to one bestial appetite.

Against this dark background of man's natural servitude emerges the second grade of apprehension, that of *ratio* or scientific knowledge. The mind rises to apprehend the world as a realm of necessary and timeless truths, deducible, as are the properties of a geometrical figure, from simple self-evident principles. Our own individuality, and that of all other things, is resolved into a structure of universal law. Spinoza's *Ethics* is an example of this type of knowing. On this level, all ideas are true. "The essence of reason (*ratio*) is nought save our mind in so far as it clearly and distinctly understands" (IV, 26). Time has vanished with imaginative thinking; all is known in the timeless order of *Natura Naturata*. "It is of the nature of reason to contemplate things as necessary, and not as contingent. Moreover, it perceives this necessity of things truly, as it is in itself. But this necessity of things is the very necessity of God's eternal nature. Therefore it is of the nature of reason to contemplate things under this form of eternity" (II, 44, C 2). The corresponding life is one governed wholly by active emotion. "By this power of rightly ordering and systematizing the bodily affections we can escape from being easily affected by evil emotions. For greater strength is needed to constrain emotions which are ordered and systematized in accordance with their order in respect to the intellect than those which are uncertain and shifting" (V, 10 S). It is a life of social co-operation, directed to a common good. The individualism which brings Spinoza's political theory, on the level of *Imaginatio*, into close relationship with that of Hobbes, is now transcended in a view of society organized on the basis of reason, that stretches far beyond Hobbes' horizon. But the rational life is none the less one of pleasurable self-realization. Since pleasure is defined as the sense of transition from a lower to a higher grade of perfection, and love as pleasure accompanied by the thought of its cause; and since on the plane of *ratio* the cause is known to be God; it follows that the life of reason is characterized by love of God. "He who clearly and distinctly understands his emotions, loves God; and loves Him the more, the more he understands himself and his emotions" (V, 15). As this love flows from the knowledge of God's immanence in *all* things, it is the strongest and most constant of the emotions. There is no directly contrary emotion that can destroy it. "Since it (i.e. *amor Dei*) is the highest good which we can seek under the guidance of reason, and one common to all mankind, we desire that all shall

delight therein; it cannot therefore be tainted by the emotion of envy or of jealousy, but contrariwise must be fostered the more, the more men share our joy" (V, 20).

But knowledge, Spinoza tells us, is possible on a yet higher plane. "Reason by itself," he writes in the *Treatise on the Improvement of the Intellect*, "will not be the means whereby we attain to our perfection." Beyond *ratio*, though springing from it as its source, is the knowledge of *scientia intuitiva*. At this third grade, the mind rises above mediate and discursive thinking. For Spinoza, as for Plato, the field of intellectual activity is wider than that of ratiocination. On the side of the knower, the knowledge in question is intuitive vision; on the side of the object known, God and His modes are grasped, not as a system of universal laws, but in their eternal individuality. God for Spinoza is the One in Many, and the Many are as real as the One. In *scientia intuitiva*, the human thinker apprehends God's unity in difference by a timeless act of vision, and therein is, and knows himself to be, eternal. That in this experience he realizes to the full his individual personality is clearly indicated by Spinoza in the closing propositions of Part V. In the *Scholium* to Prop. 20 he tells us that henceforward he will consider the Love of God *quatenus ad solam mentem refertur*, apart from its relation to the body. The implications of this statement are greatly dark, and we wonder how Spinoza would have developed the doctrine that the human *body* "cannot suffer destruction but somewhat of it remains that is eternal." Both the concepts of Love of God and Eternity undergo significant, if subtle, modification. The earlier definition of *Amor*, "pleasure accompanied by the idea of an external cause," is obviously inapplicable on the plane of intuitive knowledge; God is not an external cause, nor is man's love for Him to be described as pleasure. For pleasure is the sense of transition to greater perfection, and here transition is superseded in attainment. "Although this Love of God has no beginning, yet it has all the perfections of Love, just as if it had come to be in time. . . . Nor is there here any difference, save that the mind has had these perfections, which we imagined to be added to it, from all eternity, and that accompanied by the idea of God as eternal cause. But if pleasure consists in transition to greater perfection, felicity (*beatitudo*) must assuredly consist in this, that the mind is in actual possession of perfection" (V, 33). Nor is there any longer a place for the distinction, never clearly expounded by Spinoza, between the cognitive and emotional aspects of conscious life; the *amor Dei* of the grade of *ratio* now becomes *amor Dei intellectualis*. So, too, what was then known "under a certain form (*sub quadam specie*) of eternity" is now known, without qualifying restriction, *sub specie aeternitatis*. Once more; on the lower level of *ratio*, since God is *expers passionum*,

"he who loves God cannot endeavour that God may love him in return" (V, 19). In *scientia intuitiva*, love, as we have seen, acquires a richer meaning; with the transformation of pleasure into felicity, the relation between God and man becomes one of reciprocal communion. In the words already quoted, "God, in so far as He loves Himself, loves men; and consequently God's love towards men and the mind's intellectual love towards God are one and the same." The relationship is of individual to individual, and the eternity therein realized is likewise an individual experience. *Sentimus experimurque nos* (the plural, here and in V, 36 C, is unambiguous) *aeternos esse*: "we have conscious experience of our (individual) eternity." Spinoza's way of life culminates in personal fruition. "Thus we clearly comprehend wherein lies our salvation, that is to say, our felicity or freedom; to wit, in constant and eternal love towards God, or, in other words, in God's love towards men. This love or felicity is called in the sacred writings 'the Glory of God,' and with good reason. For whether this Love be referred to God or to our mind, it can rightly be termed 'peace of mind' (*acquiescentia animi*), and this is the same as glory" (V, 36 S).

V

No attempt has been made in the foregoing outline to discuss the validity of Spinoza's philosophy. A few of the difficulties have been indicated in passing; others will readily occur to the mind of the discerning reader. We find, for instance, that Spinoza himself towards the close of his life was troubled over the theory of Extension. In the last of his extant letters (Ep. 83), in answer to Tschirnhaus, he writes: "As regards your question, whether the variety of things can be demonstrated *a priori* from the concept of extension alone, I think I have already shown with sufficient clearness that this is impossible; and that consequently matter has been ill defined by Descartes through extension, but that it ought necessarily to be explained through an attribute expressing eternal and infinite essence. But I will perhaps discuss these questions with you more clearly at some future time, if my life is spared. For up to now I have never been able to set any of my thoughts on these things in order." The statement is brief and cryptic, save in the implication of an appeal to experience and in the rejection of Descartes's view of extension as a quiescent mass and of motion as due to God's action *ab extra*. Little light is thrown on the problems that vex the mind of the modern student. What does Spinoza mean by the indivisible extension that is attributed to God? Or by its dynamic efficacy, as possessed of timeless causal energy? How can motion be conceived apart from time, as an infinite and eternal mode flowing immediately

from God's extension? And in what sense can finite extended bodies be eternal? It would be rash to suppose that Spinoza was contemplating such a radical revision of his metaphysics as a solution of these questions would have involved. Yet it is impossible to read the Second Part of the *Ethics* without gathering the impression that his thought is moving on lines that herald the latest developments of modern physics. He was certainly not a victim to what Professor Whitehead has called "the fallacy of simple location." The corpuscular atomism outlined in the pages following on II, 13 is admittedly provisional.

The difficulty just referred to lies rather in understanding Spinoza's theory than in any demonstrable incoherence in his system. When we ask, however, as to the validity of his ethical doctrine, the case is otherwise. Of the possibility of moral liberation by way of knowledge he was assured by personal experience. Were it not so, the whole faith that inspired him to write the *Ethics* would have been vain. Yet the experience and the faith alike seem irreconcilable with the principles of his metaphysics. If time be but "an aid of the imagination," that vanishes for clearer knowledge in eternity, what real significance can we attach to the transition from a state of ignorance and vice to that of virtue? Doubtless Spinoza believed that there was place for transition and movement, construed in some non-temporal sense, within timeless fruition, and the belief has been championed by some of his modern commentators; but is it capable of intelligible meaning? The problem of evil, too, is on our hands. For, unless moral experience be robbed of all significance, moral evil, and the intellectual error from which it springs, must have a positive status in reality. Error is not mere ignorance, or vice mere deficiency of goodness. Yet, on Spinoza's principles, they must be explained away as sheer negation. How can God stand, as moral experience demands, in detachment from the law of His own being? Even if the appearance of positivity in evil be regarded as an illusion, it must yet fall, as illusion, within God. Or, to put the problem in yet another form, does not Spinoza's thorough-going determinism, with its insistent rejection of freedom of choice, cut the ground from under his belief in moral redemption? That he allows full scope for the higher freedom, that of self-dependence and self-causality, proper to God and to those who in God have attained perfection, will not save him from the impasse; what is at stake is the possibility of passing out of the state of bondage and entering upon the road to such attainment. These questions were raised in correspondence with Spinoza by van Blyenbergh, a worthy and rather simple-minded burgher of Amsterdam. Van Blyenbergh was no philosopher, and in the event his verbose and tedious letters provoked Spinoza to cut short the controversy in despair. Modern

commentators have, almost with one voice, dismissed van Blyenbergh's objections as those of an ignorant amateur, unworthy of the great philosopher's attention. But they remained unanswered, for the simple reason that no possible answer could be given to them. Moral experience is inexplicable on the basis of Spinoza's metaphysic. He could neither account for the fact of vice, nor, granting the fact, for the victim's liberation from enslavement. If deliverance be possible—and, as we have said, Spinoza never dreamt of questioning it—it can only be by driving a breach through the nexus of determinism. As a living Italian critic, Guzzo, has acutely shown, the breach occurs in the very section of the *Ethics* where the mechanism of Spinoza's theory is most pronounced, in the 43rd Proposition of Part III. The mechanistic doctrine of emotion requires that if A is hated, or loved, by B, he must hate, or love, B in return (III, 40). A little later (III, 43) we read that "hatred is increased by reciprocated hatred, and on the other hand can (*potest*) be destroyed by love." The first of these two clauses follows strictly from the mechanism. A, being hated by B, hates B back, and B's original hatred is strengthened as a consequence of the reciprocation. But how are we to understand the second clause? If A, when hated by B, responds with love, naturally B's hatred is diminished or annulled by the response. But how *can* A respond with love? The mechanism necessitates a response of hatred; yet we are told that a contrary response of love is possible. Spinoza has unwittingly, by help of a seemingly innocent "*potest*," severed the deterministic chain and, by so doing, rendered feasible the initiation of the saving process of liberation. To reply that the response of hatred is prompted by imaginative thinking, while that of love springs from knowledge of reason, is true but unavailing. The difficulty is only thrown a stage farther back. The issue is how man can ever rise, conformably to Spinoza's system, from a lower plane of knowledge to a higher. Spinoza's way of life, in short, reveals a far-reaching incoherence in his philosophy. Nor have the efforts, either of Spinoza or of his modern interpreters, to dispel the criticism proved, in our opinion, satisfactory.

But Spinoza's greatness as a philosopher does not rest on the finality of his doctrines. A metaphysical system can only claim to be final under pain of self-contradiction; for, as Hegel said in words that Spinoza would willingly have endorsed, "the life of mind is not one that shuns death and keeps clear of destruction; it endures its death, and in death maintains its being." Nor does his greatness depend on his influence on succeeding generations. Spinoza recked lightly of transitory honour, and to measure his worth *sub specie durationis* savours of impertinence. For a century after his death, his message was ignored or misunderstood. With the dawn of the

German Enlightenment, he came into his own. His fame has grown steadily ever since. To-day all serious thinkers acknowledge him for their master. It has been said that every philosopher has two philosophies, his own and Spinoza's. Those who are most conscious of the difficulties of the *Ethics* can yet draw from its study something of the eternal peace in which Spinoza found the cure for his "mortal sickness." For the true source of his greatness lies beyond "the splendours of the firmament of time," in the flight of speculative genius whereby "a mind, for ever wandering through strange seas of thought, alone" won timeless fruition in the knowledge and love of God.

NOTE

The best English version of the *Ethics* is by Hale White (Oxford Press). The *Ethics*, together with the fragment on *The Improvement of the Intellect*, is also translated in the *Everyman* Series. Students are recommended to consult Professor Joachim's *Study of the Ethics of Spinoza* (Clarendon Press) and Professor Hallett's *Aeternitas* (Clarendon Press). For those who can read Italian, Guzzo: *Il pensiero di Spinoza* (Vallechi, Firenze) is a valuable commentary on all Spinoza's writings.

REASON AND INTUITION

Professor J. L. STOCKS

One of the strangest of the many strange habits of philosophers, which mark them out as the Ishmaels of the scientific world, is their refusal to agree as to the precise meaning of the words they use. No philosopher, it seems, is bound by the definitions given by predecessors or contemporaries of even the most central terms: each has to define his terms for himself. The resulting situation certainly lends itself to ridicule and caricature, as in the legend of the theological disputants who arrived after long argument at the conclusion that when the one said "God" he meant what the other meant when he said "Devil." Still it is probable that this idiosyncrasy of philosophers has some real ground in the special nature of the task on which they are engaged, and is not a mere exhibition of aimless malice or sheer incompetence. Whether that is so or not, one of the consequences of this situation is that the titles of philosophic discourses are apt to be singularly unilluminating: as an indication of the problem to be raised they are, to say the least, highly ambiguous. How the reader may understand the title of this paper I do not know; but the question which I had in mind in choosing it was this. There is at the present moment in European thought generally a quite evident current of opinion hostile to "reason" and "rationalism." It is not altogether a new movement: it can easily be traced back for thirty years or more, and, in a more general sense, for more than a century: but it has increased noticeably in force and activity since the war. The movement is by no means purely theoretical; in fact, as often in such cases, it is easy to argue that the theoretical side of it is secondary, and that certain practical tendencies constitute the central fact. Political movements like Syndicalism and Fascism openly proclaim their enmity to reason, and in Germany the political orthodoxy of to-day represents Liberalism and Marxism as closely connected variants of a root heresy called rationalism. It is not my purpose to discuss these political tendencies—nor the related ethical tendencies, which are equally obvious and familiar, though not so easy to define with precision. I wish to concern myself only with the theoretical revolt against reason, and with that particularly in the form in which it opposes to reason a supposedly superior form of cognition called intuition. I want to ask how this opposition

is to be understood, whether it can be justified, and if so whether the superior status is rightly accorded to intuition.

My general purpose in this paper is to challenge the current opposition of reason and intuition. I propose to argue that in any plausible sense which can be given to these terms they must be regarded as complementary, not as rivals; and in particular that (*a*) reason depends on intuition and (*b*) intuition depends on reason.

I. Meaning of the Two Terms

In the absence of agreed definitions, to which reference has been made, it is necessary to begin with some preliminary determination of the sense or senses in which the terms will be used. Here previous usage is the safest guide. The word reason has a long and varied history, and by one line of tradition, which goes back to the Greeks, summarizes all that differentiates man from the lower animals. That sense is too wide for our purpose, for reason in that sense will express itself in the practical field and in other non-cognitive or not purely cognitive activities. It is reason, in that sense, that domesticates animals, tills the ground, and builds cities. Even if reason is restricted to the cognitive field, as covering all that is distinctively human, it must include the intuition which is said to be the rival of reason. A narrower sense of the word is evidently needed. The word must stand, *first*, for a cognitive act or power, and, *secondly*, for an act or power which is not co-extensive with cognition: otherwise there would be nothing for it to oppose. The *Oxford Dictionary* recognizes only one use of the word which satisfies this requirement, and this it marks as obsolete. The definition given is "the act of reasoning or argumentation." Following this clue, I think we shall not be wrong in supposing that those who oppose reason to intuition, to the disadvantage of reason, mean to include in the sphere of reason whatever in the way of knowledge or belief can be secured by reasoning.

Intuition is a much more modern and less familiar term. Attempts have been made at times to give it technical precision; but here again the tradition is rather confusing. It is derived from a verb which means "looking at," and its extended use must be presumed to have originated as a metaphor from sight. It would stand, presumably, for a mental inspection in which a direct revelation is made to the mind, comparable to the direct revelation which accompanies the exposure of a physical object to the eye. We find the word in use in the early days of modern philosophy, e.g. in the writings of Descartes and Locke, to designate the apprehension of general truths which are self-evident and need no proof. It was obvious that there must be such truths: otherwise how could

demonstration start? And it was equally obvious that such truths could not be directly credited to sight or any other sense. A quasi-sight of the mind, a mental inspection is supplied to fill the gap. This was the normal use of the term in the eighteenth century, and when Richard Price gave it prominence for the first time in ethical theory, he was consciously basing himself on this tradition. He was asserting (in his own words) "an immediate perception of morality without any deductions of reasoning." The moral intuition was for him an intellectual act, containing its own evidence, and not requiring or admitting of direct substantiation from without. In this use intuition is opposed to demonstration, and it is in a sense regarded as superior to it: for it is a simple act, while the other is a laborious and complicated process of reasoning, and the act is the foundation and starting-point of the process. We thus obtain *principles*, which are all-important. "This kind of knowledge," said Locke, "is the clearest and most certain that human frailty is capable of. This part of knowledge is irresistible, and like bright sunshine forces itself immediately to be perceived, as soon as ever the mind turns its view that way . . . the mind is presently filled with the clear light of it" (*Essay*, IV, ii). Intuition, though opposed to demonstration and reasoning, is the necessary basis of these, and all their certainty is derived from it. Where they succeed, it is by spreading this bright light, weakening it perhaps a little in the process.

Price's extension of the term to ethics first complicated the tradition: for whatever the fundamental truths of ethics may be, clearly they are not self-evident principles which serve as the basis of demonstrative reasoning. A further complication was introduced when the term was adopted as the English equivalent for the Kantian *Anschauung*. The famous saying *Anschauungen ohne Begriffe sind blind* was rendered "intuitions[1] without conceptions are blind." Here intuition stands for what is given or forced on the mind from without, as opposed to the conceptual framework which is supplied by the mind from its own resources. Intuition now includes sensation or sense-intuition, and the opposition between what is given and what is taken or supplied replaces the opposition between what is self-evident and what receives or requires demonstration. Intuition is still underivative, immediate, irresistible, but it cannot now of itself give us any proposition at all. Judgment can only take place when the matter of intuition is given conceptual form. Intuition

[1] Not always. Some translators prefer the word "perception." Professor Prichard, for instance, in his book *Kant's Theory of Knowledge* always uses this equivalent. But the latest and best translation of the *Critique of Pure Reason*, by Professor Kemp Smith, uses "intuition," and it is increasingly prevalent.

is no longer an act of mind: the typical act is judgment. It has become an abstraction—the name for one of two complementary factors which can be detected by analysis in that familiar act. Intuition thus regarded tends to become a power to seize and hold in mind the *appearance* of an object, primarily of an object with which we have direct contact through the senses, secondarily of any other object which can be said to be taken in in one mental view. In its secondary applications the object of intuition may be something like a mathematical series, the thinking self, or God, which is not a physical object at all and therefore not accessible to sensuous intuition.

The inadequacy of the word intuition as an equivalent for Kant's *Anschauung* lies precisely in the fact that in our use the non-sensuous or not-purely-sensuous application is primary, and the sensuous application is secondary or non-existent, while in his use the application to the sense field is primary and all other applications derivative from it. This can be well seen in a passage from a recent English work on Perception. In Mr. H. H. Price's admirable book published two years ago under that title he spends a long time on a careful analysis of sense data and other factors in the perceptual situation, and then adds that he feels obliged further to credit the perceptual act with what he calls a "pseudo-intuitive" character. He explains that for him "genuine intuition" is rather the *result* of active thinking than its precondition. It is the function by which we build up and keep in mind subjects for our judgments. This is for him the primary meaning of the word. But he is prepared to extend it, with the reservation expressed in the prefix "pseudo," to sensory apprehension. His reasons for this are given in a passage which I will quote in full, because it throws much light on the connotation which the word intuition has now come to possess. He opposes "intuitive" to "discursive" consciousness.[1] "In discursive consciousness," he says, "there is a passage of the mind from one item to another related item, for instance, from a subject to a concept under which we classify it, or from premises to conclusion. . . . And when we have discursive consciousness of a whole or complex of any sort (as in counting), although the whole may be vaguely present to the mind from the first, yet definite consciousness of the whole comes *after* consciousness of the parts. In intuitive consciousness, on the other hand, consciousness of the whole comes *before* definite consciousness of the parts. And there is no passage of the mind; whatever we intuit is present all at once. We might say that intuitive consciousness is 'totalistic,' not

[1] This opposition is of course very ancient, going back to the Aristotelian opposition of *νοῦς* and *διάνοια*, in which the latter term is approximately equivalent to reasoning or the capacity for it.

'progressive' or 'additive.' " He adds the further mark that intuition lacks the activity of "seeking" or "following" which is characteristic of its opposite. It is not passivity, but yet it is also not activity. "The mind rests, as it were, on its object." Here, it will be observed, the reversal of which I spoke is complete. A word which first had direct application to sense-perception and was applied by a metaphorical extension to thought, here applies directly to a function of thought and is extended metaphorically to cover an analogous feature of sense-perception.

I believe that any significant use of the term intuition must be in close relation to the description given by Mr. Price. Intuition in this sense has no obvious claim to be described as the source of self-evident propositions. This older use of the word seems in fact to be becoming obsolete, but it must not be forgotten, because it is apt to turn up unexpectedly and confuse the issue. Thus in Ethics intuitionist is still used as the name of a school, and the characteristic tenet of the school is often taken to be the belief in self-evident principles of action. This clearly depends on giving intuition its older sense. Dean Rashdall's analysis of ethical intuitionism in his *Theory of Good and Evil* (1907, I, iv), presupposes the older sense throughout; that is why he thinks of intuition with special reference to the end of action, for the end, as Aristotle observed, is the starting-point of the argument of which the act is the conclusion. It takes the position in the practical syllogism which the basic principles of a science take in the syllogism of that science. This shows that the older use still persists.

If now we may sum up the line of interpretation represented by Mr. Price in his own word "totalistic," and refer to the other line of tradition by the word "self-evident,"[1] we may provisionally conclude that the use of the term should be governed by reference to one or both of these marks, at the same time noting that on present evidence it does not appear that either of these marks directly involves the other, or even that they can be significantly regarded as combined in one mental act.

II. The Dependence of Reason on Intuition

If reason stands for the power to produce certainty or probability by means of argument, it is evident that it will be responsible for everything that deserves the name science and a good deal that is not commonly given that name. Its sphere will include mathematics and the most purely theoretical sciences, those which have

[1] But there are two kinds of self-evident: (*a*) general principles, e.g. axioms of geometry, (*b*) what is directly assured by observation, the evidence of sense.

a predominantly deductive character; but it will also include the more empirical sciences, those which rest mainly on induction. Unless some further restriction of the term reason is found possible, it is not easy to exclude even history: for the historian also is occupied in weighing evidence and has to argue his conclusions. But those who depreciate reason do not appear to have history in mind; and it may reasonably be maintained that the aim of the historian is differentiated from that of the scientist by the fact that the historian is occupied in determining the individual character of a period or movement, while the scientist seeks general laws governing individual behaviour. If we qualify our description of reason accordingly, it becomes the power to produce general truths or probabilities by argument, and its sphere will then be co-extensive with science and the possible applications of the scientific method.

Now clearly every argument must start somewhere. This argument may rest on a previous argument, but, if an infinite regress is to be avoided, there must be an ultimate starting-point, which does not need or is taken as not needing proof. Our tradition therefore represents reason as dependent on intuition in one or both of its two forms, either in the form of apprehension of self-evident principles, as in mathematics, or in the form of empirical perception. In the former case the whole process is guaranteed by the self-evidence of the starting-point and the rigour of the demonstration which follows: in the latter case a high degree of probability may be attained by the exhibition of precise conformity on a sufficient scale between the deductions from the hypothetical principles and the observed events. Also it has frequently been asserted that intuition is operative continuously throughout every process of reasoning, since each step in the reasoning, taken by itself, is an intuition, self-evident and needing no external justification.

The champion of intuition may well reply that all this, however true it may be, is beside the point and does not touch his case, because the intuition which he regards as superior to reason is neither assurance in regard to what is presented to sense nor apprehension of self-evident general principles. To him I would reply that if intuition is given some such sense as Mr. Price gives it—what we have called its totalistic sense—in this sense also it must be regarded as an indispensable ingredient in the judgment of reason. How does the thinker, I ask, hold together the successive moments of his thought? His argument is a process occupying, it may be, a considerable stretch of time. In a physical process one imagines that the past is simply dead and gone, that all that is real and effective is carried forward through the successive terms to a single definable issue in the last. But in the case of a mental reasoning process this simply will not do. There is certainly an issue, a con-

clusion; but it is not asserted in its own right; it is not a view or vision secured by the path which constitutes the process. It depends for its truth, even perhaps for its meaning, on what was revealed in the course of the process, and it is not adequately asserted unless it is asserted in its dependence on all that. How, I ask, does the thinker hold all this in view? I answer that to explain this we require intuition in its characteristic function of making possible the keeping of a whole in mind, i.e. in the totalistic sense. We cannot suppose that the thinker, as he proceeds to each new proposition, remembers all the propositions which he has previously asserted, and it is equally impossible to suppose that he has forgotten them: he has them, evidently, in some real sense in mind. As propositions, as assertions, they are dead and gone; but their work remains. Each proposition, as it is asserted, has its felt source and confirmation in an intuition of the relevant whole, and contributes something to the development of that intuition, so that, when the development is fruitful, other assertions are possible thereafter which were not possible before. When the aim of the connected statement is mere description, the control of the intuition is obvious: the successive sentences stand in external relation to one another, united only by the intuition which is their common ground and product. Where the aim is proof, the control of the intuition is, I submit, not less necessary, but it is masked by the logical relations which give the series an *asserted* bond of union.[1] My contention is that these logical relations, together with all else that is, or can be, genuinely asserted, have their ground in an intuition.

I am tempted to give this theorem a yet wider range. What is the essential advantage of ripeness and maturity in any science, in competition with adventurous youth? Not merely, surely, wider knowledge, greater experience, a richer store of precedents and parallels; still less, greater acuteness in making deductions and in devising hypotheses and expedients. In some of these respects, certainly the last, youth may well have the advantage. Given equal abilities, a mature student tends to find problems simpler than his junior: he is less distracted by side issues and goes straighter to the point. He is surer of his ground. And the reason for this may no doubt partly be that he has already had his successes and has gained confidence from them; but it is, I suggest, much more that he has a fuller, richer intuition of the science in which he is working, of the developing system to which his work is a contribution. That intuition has been built up by years of thought and effort, much of which the man himself has long forgotten, but all of which has contributed to the result. It is the control of this intuition that

[1] "Since," "because," "therefore," "nevertheless," are examples of what I call asserted bonds of union.

makes him so sure of his ground, so steady in his aim, so wise in guidance. It is this that gives his handling of a problem so curious a resemblance to the operation of unquestioning instinct.

In all these various ways man's power of reasoning is hedged about with immediacies, any or all of which may be given the name intuition. Reasoning is no autonomous, self-directing power, but conditioned in its expression from beginning to end by these. The function of reasoning may in fact be described without inaccuracy as precisely the development of intuition. It is possible of course that intuition admits of other developments, some of which may be more valuable and important. That remains to be seen, and for a complete answer to that question it would be necessary to determine the metaphysical status of general truth such as the sciences establish. It is sufficient, however, for the present to record the conclusion that reason is dependent on intuition and pass to the other side of the question.

III. Intuition is Dependent on Reason

By treating reason as a general name for that region of thought and knowledge in which reasoning is central, we were able to identify it approximately with science. None of the suggestions so far considered as to the nature of intuition enable us to identify a rival region in which intuition predominates. But some such region is wanted if the current opposition of intuition to reason is to be justified, or even understood. We have already argued that all judgments rest on intuition; and some of these from the systems which are collectively credited to reason. We have to find others, which, whether capable of systematization or not, may be credited to intuition. Thus we want a development of intuition in which the intuitive character of the starting-point is retained, so that the result is a higher and more developed intuition in a sense in which the reasoned judgment of the scientist is not.

The only clue worth following is that offered by Mr. Price's totalistic intuition. Judgments possessing some such character may be found in very close relation to sensation. "In knowledge by sense," says Hobbes (I, 66), "the whole object is more known than any part thereof. . . . And therefore in any knowledge of the ὅτι, or that any thing *is*, the beginning of our search is from the whole idea; and contrarily, in our knowledge of the διότι, or of the causes, of any thing, that is, in the sciences, we have more knowledge of the causes of the parts than of the whole. For the cause of the whole is compounded of the causes of the parts; but it is necessary that we know the things that are to be compounded, before we can know the whole compound." Hobbes is of course a rationalist,

and he is not questioning but justifying scientific analysis. Yet he seems to recognize a certain superiority in that superficial knowledge of the whole from which the analysis starts over the probably more accurate knowledge of the parts which is the immediate achievement of the scientist. Those who champion intuition would probably accept Hobbes's assertion that if we want knowledge of causes we must proceed by some such analysis. But they would probably deny the implication of his statement that by such analysis the knowledge of the compound is arrived at. They would contend that we have here the characteristic delusion of rationalistic science in the unquestioned belief that correct analysis results in the knowledge of the analysed whole. In their view the need and value of intuition depends on this, that it gives a knowledge of wholes in their integrity which the methods of reason can never give.

A criticism of reason similar to this and a similar conception of the kind of rectification necessary is implied in Spinoza's description of the goal of thought as *Scientia Intuitiva*, intuitive knowledge. The recovery of individuality, lost or submerged in the previous scientific stages of thought, is in fact Spinoza's leading idea. Mr. Roth describes *scientia intuitiva* (*Spinoza*, p. 233) as "intuitive insight into individual essence." "Abstract recognition," he writes (p. 140), "passes into concrete appreciation. Man is then conscious of nature as a unity, but not as before from the outside. He feels it in himself; he understands its wholeness in and from his own being. He thus not only contemplates externally the ways of the universe in which, like everything else, he is caught up. He not only sees himself as one item in the detail controlled by an all-embracing cosmic order. Nature for him is more than an abstract whole of general laws. It is a concrete system of self-directing individualities. He knows himself in it as an individual, and realizes his place in it among other individuals. He grasps both himself and things, not in their universal aspect only, but in their unique singularity. He has absorbed the truths of the discursive reasoning of science and passed beyond it to the intuitive apprehension of philosophy."

It is important to notice that Spinoza's intuition, as described in these sentences, while undoubtedly conceived as something higher than what we have been calling reason, is yet in no rivalry with it, or opposition to it. It represents a further goal, but one only to be reached by the incorporation of all that reason can contribute. Thus Spinoza may be said to endorse by implication the criticism outlined above that scientific analysis can never reach the knowledge of the whole which it seeks, but to reject the suggested inference that such knowledge requires a method independent of reason. What Spinoza sketches is an ideal completion of the work of science, and his difficulty in finding concrete examples of intuitive

knowledge springs presumably from the fact that human thought on the lower scientific level is still so imperfectly developed.

It is not the process character, the discursiveness, of reason which is now in question, but the generality of the truths which it reveals, and intuition is offered in contrast or as supplement not for its immediacy but as achieving the apprehension and appreciation of the individual. This being so, it is pertinent to ask whether already in our imperfect state of development we have not some knowledge of the individual. For in that case we shall not need to wait till science has done its work to get some notion of the structure of a thought in which individuality is apprehended, and if such apprehension is rightly called intuitive, we may find some substantial basis for the alleged rivalry of reason and intuition.

To this question I should reply that we certainly possess and constantly achieve knowledge of the individual, that many of our most massive certainties and probabilities depend on it; and, in particular, that history and biography represent a systematization of such knowledge, that all practice and theory of art is another expression of it, and that without it human action would lose altogether its moral, though not perhaps its economic, character. The knowledge aimed at and to some extent achieved in these activities is certainly something that science, as such, cannot give and does not claim to give—i.e. the questions asked are not included among those which the scientist tries to answer. But it does not follow that the scientist is precluded from making any contribution to the answer of the questions that *are* asked, only that any contribution he makes must be subordinate. There are special difficulties in the case of art and aesthetic judgment, which must be passed over here. I would only say that the aesthetic judgment seems to me to be the product of abstraction, though of a different order from the abstractions of science. Therefore I put it on one side. The other two types of judgment mentioned, the historical and the practical, are in no sense abstract; and if they represent the work of intuition, they represent, I submit, an intuition which is in no rivalry or opposition to reason but welcomes every contribution which reason can make to the solution of their proper problems.

This is best seen in the practical judgment, i.e. in the judgment of a man faced by a concrete situation in which action is demanded and deciding on which of various possible lines it will be best to act. Best seen here, because it is obvious that no side of the complex fact can safely be ignored, because in short here it is most imperatively brought home to us that (as Butler says) "things are what they are and their consequences will be what they will be." In such a situation the ultimate issue, which is being prepared throughout the process of deliberation, is an individual response to an individual

(particular) situation. This is the issue and it is this after the event that forms the subject of moral valuation when the act is judged good or bad. But beforehand in the process of deliberation the action may be seen in other lights. Viewed economically, in reference to this and that satisfaction, the bearing of any proposal can be pretty exactly calculated. On this side values are commensurate, and the balance of loss and gain is fairly easily struck. Here reason is supreme in the sense that the knowledge applied and the methods used are scientific in character, and an irrefutably demonstrated conclusion is not out of the question. Thus if the action involves, e.g. the provision of necessary food, the results of scientific investigation as to the nutritive value of various foods will naturally be taken into account. But when all the calculations have been worked out, the real decision remains to be taken. The agent has finally to decide whether he will or will not act on the line shown to involve such and such possibilities of gain or loss. He has eventually to reach the position where he says "this is the thing to do." No amount of reasoning will bring him to that point. Here, I suggest, intuition is needed to supplement and complete the work of reason, and it is needed because what is in question throughout is, as I said before, an individual response to a particular situation. But that intuition is dependent on the rational analysis and conditioned by it: it is not a certainty, arising from mere inspection, to which reason makes and can make no contribution. On the other hand, since analysis can never exhaust the individual, no logical relation can be established between the final intuition and the arguments which preceded it. The arguments lack final cogency: they are only (to borrow a phrase from Leibniz) inclining reasons. The final intuition remains unproven and unprovable.

This practical intuition I give as an example of Mr. Price's "genuine" intuition, which is the *result* of active thinking. The name intuition is, I think, appropriate, but it is no enemy or rival of reason. Its function is different, but in the performance of that function it welcomes whatever light reason can give. Intuition in this sense, in short, once more is dependent on reason.

IV. Conclusion

The time has now come for a final judgment on the issues of this controversy. In the foregoing I have been chiefly occupied in showing the interdependence of reason and intuition. But the discussion has been hampered throughout by two factors—first, by the acceptance, for the sake of argument, of what I personally regard as an awkward and improper restriction of reason to the field of argument or express inference; secondly, by the difficulty

of avoiding ambiguity in the word intuition. The first point I will reserve for the moment. As to the second, a critic would have some justification for objecting that the intuition on which reason is said to be dependent is not quite the same as the intuition which is said to be dependent on reason, so that the thesis of interdependence (he might say) breaks down. This charge of equivocation would not be very easy to meet. But after all it is not very important that that it should be met. Even if it is upheld, the main point remains untouched, that whatever sense is given to the word intuition, it is always found in intimate relation to the reasoning process, never in sheer opposition to it. It will be remembered that we distinguished two main tendencies in the use of the word, to which we gave the labels "self-evident" and "totalistic." Perhaps we may be allowed now to substitute the word "immediate" for "self-evident." It is a rather more expressive term and applies more naturally to sensation which has to come in. Making that substitution, we may, I think, say that any general description of the activity of thought (which is also, it must be remembered, the actuality of knowledge)—that any such general description is false which does not include, in addition to inference and reasoning, *both* senses of intuition. Thought starts from the immediate and ends in the totality, which is and must be individual. Reason (as defined) falls between these two poles and is incidental to the passage of thought from the one to the other. It is therefore fundamentally conditioned by both.

The totalistic intuition, then, it is asserted, is the goal, and this intuition is superior to reason. Some correction may be necessary for metaphysical differences, but in principle Spinoza's ideal of a *scientia intuitiva* is accepted. Is not this, it may be asked, an endorsement of the case against reason and of the contemporary reaction against rationalism? Well, if rationalism stands for the view that the world can be known and life lived by something like a set of geometrical theorems, it deserves summary rejection. If it supplements this *a priori* geometry only by the more modest and tentative construction of empirical science, it still deserves rejection. For general truths are not enough. They do not give knowledge of the individual; and the individual is real. But if rationalism stands for the conviction that whatever can be scientifically analysed and examined should be submitted to such examination, that the fear and distrust of reason is a major crime against humanity, that civilization consists in and depends on nothing so much as on the prevalence of such rational analysis and the assistance and protection of those who practise it, then rationalism stands for health and sanity and should have the support of every thinking man. An intuition which claims sacrosanctity and declines the test of reason

is, as Locke and Mill both protested, a moral and social offence, a mere misnomer for blind prejudice and crass superstition.

Finally, I come back to Reason and the question what it stands for. Why do we regard rejection of reason as a crime? The answer is simple and was well known to the Greeks of the fifth century before Christ. The λόγος of Heracleitus of Ephesus, first ancestor in the line of descent which culminates in the λόγος doctrine of the Fourth Gospel, was called by him the "common" or "universal." "Though the Word," he wrote, "is common, most men live as if each had his private wisdom" (*fr.* 92). By it alone we are saved from confusion and anarchy, as a city by its laws (*fr.* 91). He calls it also eternal (*fr.* 2). Reason stands in truth for what men have in common, for the ability to transcend the limitations of time and space, to discount the effects of position and perspective. The intuition which is opposed to reason is the "private wisdom" of Heracleitus, the wilful refusal to attempt the universality which reason aims at, the defiant assertion of personal and collective particularisms as necessities of life. Such rejection of reason is a crime, not merely an error, because the striving for community and universality is the foundation of all genuine morality. The situation of man is surely plain enough. By his senses and by the appetites which are correlated with them he is at the mercy of his physical environment. From this bondage, so far as he is reasonable, he seeks to deliver himself, so that he may "look abroad into universality." The escape is at times painful and difficult, and among his fellow-sufferers there are not only many who are sceptical as to the possibility of escape, but also some who denounce the very attempt at escape as selfishness and treachery. They say his duty is to hug his chains till they are chains no longer. To such doubts and scruples the truly reasonable man is obstinately deaf. He persists in seeking the common ground, inspired by the faith that truth independent of place and position is attainable to man. Such faith is rightly called faith in reason: for reason in the narrower sense is the instrument by which deliverance is sought and in the wider sense it is the freedom which is the goal. In the narrower sense it may be opposed to intuition, but only in the way in which analysis and synthesis may be opposed as complementary processes within a developing whole of thought: in the wider sense it includes the intuition which is at once its product and its justification.

SOME IMPLICATIONS OF A PASSAGE IN PLATO'S *REPUBLIC*

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In Book VII, p. 520, Socrates describes the arguments by which the philosophers must be induced to "return to the cave," that is to say, to resume the practical business of politics from which they have escaped into the better life of contemplation. They must be shown that this sacrifice is a debt which they owe to the city in return for the opportunity which it has afforded them of becoming philosophers. "Will our pupils,"[1] he continues, "when they hear this, refuse to share in turn the toils of state, when they are allowed to spend the greater part of their time with one another in the heaven of ideas?" "Impossible," Glaucon replies; "for they are just men, and the commands which we impose on them are just; there can be no doubt that every one of them will take office as a stern necessity, and not like our present ministers of state" (*δίκαια γὰρ δὴ δικαίοις ἐπιτάξομεν. παντὸς μὴν μᾶλλον ὡς ἐπ' ἀναγκαῖον αὐτῶν ἕκαστος εἶσι τὸ ἄρχειν*). "Yes, my friend, and there lies the point," says Socrates, "you must contrive for your rulers another and a better life than that of a ruler, and then you may have a well-ordered state."

It has often been recognized that the injunction to the philosophers to return to the cave is the point above all others in which Plato transcends the limits of Platonism. I wish to use the passage which I have quoted to illustrate this.

It is remarkable because it contains the conception, expressed, to my knowledge, nowhere else in Greek philosophy, of Moral Obligation,[2] or Duty. Greek moral philosophy in general defined right action as that which was conducive to the agent's highest good; such action lacks a characteristic essential to an act of duty, in that the obligation to perform the latter is irrespective of the agent's good. In the *Republic* all the acts in the life of a Guardian up to the point at which he is bidden to return to the cave are judged by the former standard, they are determined as right or wrong according as they are or are not means to his highest good,

[1] 520d, Jowett's trans.

[2] I should say rather "Athenian," since I do not propose to take notice of any philosophy except that of the Socratic, Platonic, and Aristotelian tradition.

which is the achievement of the best life. But the command to return to the cave both is and is clearly recognized to be[1] a command to surrender a better life for a worse one. If this act therefore is right, it is right in a different sense from that of conducing to his highest good.[2]

What is it which makes this sacrifice of the highest good nevertheless right? In the passage which I have quoted, Plato says, "Justice" (*δίκαια γὰρ δὴ δικαίοις ἐπιτάξομεν*). Justice is certainly a common enough conception in Plato's pages, and if it should appear that this act is just only in the same sense in which other acts of the rulers, and any acts of the subjects in the state, may be termed just, it would be necessary to surrender the contention that this act embodies a conception unique in Plato, and shares with actions done in obedience to duty a characteristic which is lacking to the generality of actions which Plato designates as just. It is worth while, therefore, to inquire a little into Plato's general conception of justice, to see whether it is really adequate to cover this case.

This inquiry is met at the outset by the following difficulty: it does not clearly appear in what relation Plato held justice to stand to the Good. It is indeed indubitable that he held justice to be a means to the highest good, but when that is granted, two alternative possibilities remain open: the first, that he defined the just act as that act which conduces to the highest good, so that its being a means to a good end is what alone constitutes it just; the second, that he defined justice by some other criterion, but held that there was a necessary connection between the justice of the act and its tendency to achieve the highest good of the agent.[3] The point may be expressed in a convenient jargon as follows: granted that the just act necessarily conduces to the highest good of the agent, the question still remains open, whether that is for Plato an analytic or a synthetic proposition. The question cannot be

[1] *Ἔπειτ', ἔφη, ἀδικήσομεν αὐτούς, καὶ ποιήσομεν χείρον ζῆν, δυνατὸν αὐτοῖς ὂν ἄμεινον.*

[2] It is thus an exception to Professor Prichard's dictum (*Duty and Interest*, p. 10) that Plato implies "that it is impossible for any action to be really just, i.e. a duty, unless it is to the advantage of the agent." Professor Prichard assumes that throughout the *Republic* the word *δίκαιος*, when applied to actions, means "right" or "morally obligatory," and he concludes Plato's doctrine to be that such actions are necessarily conducive to the agent's good. Granted his assumption, I think his conclusion would follow, provided only that he would except the passage now under consideration; but I would reject his assumption, and prefer to express the facts by saying that *δίκαιος* has not the meaning of "morally obligatory" in any passage of the *Republic* except this.

[3] Cf. Prichard, op. cit., pp. 12 ff.

solved by appealing to Plato's own definition of justice as "doing one's own work" (τὸ τὰ ἑαυτοῦ πράττειν), because there is an ambiguity in that definition. If "his own work" is defined by reference to the agent's soul, and means the work in which his nature finds the fullest realization of which it is capable, the proposition that justice conduces to his highest good is analytic, because the full realization of his nature is his highest good. But if "his work" is defined by reference to his place in the city, and means the work which the well-being of the whole society requires from him, then the proposition in question is synthetic.

I do not myself believe that either interpretation can claim to exhaust Plato's meaning, because I think both meanings are present in confusion together in the *Republic*. However that may be, I shall make no attempt to decide the question, but assuming each interpretation in turn, I shall ask whether either affords a definition of justice according to which the return of the rulers to the cave would not be more than just.

The former alternative need not detain us long, for it implies that there is no criterion of justice except its tendency to conduce to the highest good of the agent, and we have already remarked that the returning guardian must sacrifice his highest good. If "the work," to do which is justice, is the work in which the doer's nature is fulfilled, the guardian is not doing it when he comes back to the cave. If, therefore, his return is to be called just, it is just in a sense quite different from that defined.

If we adopt the second alternative, we must ask by what criterion, other than that of conducing to good, the just act is to be defined. The criterion is given by the second alternative interpretation of the phrase "doing his own work"; that act will be just by which a man best performs the function proper to his position in the state. It might seem at first sight that such a definition of justice would cover the self-sacrifice of the guardians. Their position would remain even then an exceptional one in this respect, namely that in their case alone justice does not conduce to happiness (as the justice of the subjects always does), but demands its sacrifice; but it might be held that their act differed from any just act of a subject only in its results, not in its principle. This peculiarity would indeed be sufficiently striking in itself to provoke an inquiry into its ground; but I shall not pursue that inquiry, because the assumption that the principle itself is identical in both cases, is mistaken.

Granted that a man occupies a certain position within a state, he is bound by the rules of justice to perform the functions proper to his station. But they apply to him only *qua* occupant of such and such a station; he is to do "his own work," but what in any

given case his own work may be, depends wholly upon the station which he occupies. Membership of the city being, therefore, the condition of a man's being subject to the rules of justice, the act of becoming a member, which is his subjection of himself to their operation, cannot itself be prescribed by them; or, to occupy a certain station cannot be one of the duties of that station. But the return of the rulers to "the cave" is precisely the act of assuming membership of the state.

The definition of justice as "the doing one's own work" implies a prior membership of a society; the obligation of joining a society cannot be a duty arising from membership of it; if, therefore, the act of assuming membership in the state is still to be called (as Plato calls it) "just," this can only be upon the ground of a community existing prior to the formation of a political society, between the rulers and those with whom they join. This duty, then, if the implications are drawn, will be found to exhibit the peculiar characteristic of moral obligation, that it depends upon the community of man with man, not upon that of citizen and citizen.

The duties incumbent on a man in virtue of his station in the city are determined by the law (*νόμος*) of the city, so that justice implies obedience to a Nomos. The act by which a man subjects himself to the Nomos of a city cannot be prescribed by that Nomos. If, therefore, it is nevertheless a duty, it is a duty prescribed by a law prior to, and independent of, that of the state. To be thus prior and independent is the peculiar characteristic of the Moral Law.

The point to which I wish to draw attention is the following: what this doctrine of Plato presupposes, Christianity revealed. That all men are as such members of one society, and that they owe obedience to a law of conduct prior to all positive laws are two of the principal doctrines of the Christian revelation. This is the source from which modern philosophy derived the ethics of duty which was almost lacking from the moral philosophy of Greece. Thus of the Kantian ethics, for example, it would not be untrue to say that it assigns to all acts of all men the character which Plato assigns (if only by implication) to a single act of a single class. Kant makes explicit the presuppositions of moral obligation. Among them are the subjection of all men to a universal moral law, and common membership of all men one with another in a "Kingdom of Ends"—principles clearly identical with doctrines revealed in Christianity.

In the lives of the subject-classes in Plato's city there is no act analogous to that by which the rulers assume (or resume) membership of it, because they are members of the city by nature and

not by choice. In order to make such a choice (and that is, in order to act in the full sense as a moral agent), the ruler must be capable of a life other than the political, since he could not be said to choose that to which there was no alternative. This condition of moral action is not merely implicit, as the former two were, in Plato's doctrine, but is expressly asserted by him to be fulfilled. "You must contrive for your rulers another and a better life than that of a ruler";[1] the rulers must be men who have "other honours and a better life than the political" (*βίον ἀμείνω τοῦ πολιτικοῦ*).[2]

In asserting this, Plato was flatly contradicting the fundamental principle of the classical Greek political philosophy, namely that man is by nature a member of a state, or a "political animal." He is anticipating a doctrine which was an integral part of the Christian revelation, and which became, when it was adopted thence into philosophy, the fundamental principle of all modern political theories. It appears in Christianity as the doctrine that man is heir to eternal life; this is the "better life than the political," which redeems him from a natural immersion in the latter. In modern political theory it appears as the doctrine of the Social Contract of which, if the wrappings are discarded, the essential principle will be found to be that man's membership of the state is voluntary, not natural.

If we take together all those points in which Plato is found in this passage to transcend, whether by assertion or only by implication, the normal limits of Greek thought, it appears that his argument either anticipates or requires three doctrines—those of the brotherhood of man, of the moral law, and of eternal life—which were both central to Christianity and the root of much that is distinctively modern in moral and political theory. But there is another doctrine, equally contained in Christianity and equally presupposed in modern moral and political theory, of which we have so far discovered no hint in Plato: that namely of the equality of man. The "better life than the political," the voluntary membership of the state, the subjection to a moral obligation—the farthest to which Plato's thought reaches, or can be made to stretch, is (or so it appears) to the attribution of these things to the guardian class. The subject-classes, in being cut off from philosophy, are cut off from the one condition which makes them possible, since the philosophical is the only life which Plato can conceive to be better than the political.[3] They therefore are neither members of the city

[1] From the passage quoted above.

[2] 521b.

[3] Cf. 521b: *ἔχεις οὖν βίον ἄλλον τινὰ πολιτικῶν ἀρχῶν καταφρονοῦντα ἢ τὸν τῆς ἀληθινῆς φιλοσοφίας;*

by their own will,[1] nor subject to any law but the law of the state. So long as we concentrate attention upon these consequences we are bound to conclude that Plato had not extricated himself from the Greek view of natural inequality which finds its classical formulation in Aristotle's saying that some men are born to rule, others to be ruled.

The expression of Plato's belief in inequality is his threefold division of the state into classes, and this is the root of those consequences in his political theory which most offend a modern judgment. Its implications, rigorously drawn, are that the lowest class is incapable of the highest human virtues, namely courage and wisdom, and that this class is excluded from the liberal education, moral and intellectual, of which the end is the development of these virtues. We need not suppose that a Greek judgment would have been equally outraged by these conclusions; they could hardly be very shocking to a people who believed slavery to be natural, and identified education with leisure. But it would, of course, be a caricature of the *Republic* ruthlessly to draw the implications of the class-division, and to present these as Plato's whole doctrine. It is both easy and necessary to point out many passages in the *Republic* implying consequences utterly incompatible with these. Most of these incompatible consequences may be seen, I think, to flow from Plato's conviction that the virtue of justice at least is common to every member of the state. The *virtue* of justice is not merely a mechanical conformity to rules of action imposed from without, it is a disposition of the soul. Plato defines it as the right ordering of the three elements within the soul, Reasonable, Spirited, and Appetitive. If, therefore, a member of the Third Class is capable of this virtue, his soul must be equipped with all three faculties, and he must be as complete a man as any ruler. Let us by all means stress this tendency in Plato (I will label it the "equalitarian" for convenience); it is certainly part, perhaps the most important part, of his teaching. But the more we do so, the more glaring becomes the incompatibility between the two parts of Plato's teaching. If the subject is by nature as complete a man as any ruler, why can he not be trained to become one? But if he can, the whole basis of Plato's class-division is dissolved. If the subject can be just, he must be endowed with the two faculties of Reason and Spirit: why, then, can he not acquire the two virtues of Wisdom and Courage?

[1] This does not mean that they are not willing members of it, but that consent is not a condition of their membership. Their willingness depends upon the formation in them of such a disposition ("Justice in the soul"), that they fulfil the law at last not against the grain. But the formation of this disposition is the result of life in the state, not vice versa.

Attempts are sometimes made to soften these incongruities. I do not myself believe that any such attempt can stand investigation, but this is not the place to try to refute them. I shall conclude instead with a protest against a high-handed method of treating Plato, which is not the more justifiable for the fact that it is sanctioned by tradition.

This method proceeds from the assumption that Plato, since he is admittedly a very great philosopher, must have been at the least an enlightened man. His judgment must, therefore, have been fundamentally in agreement with that of enlightened men of other ages, say of the present. He must be held, consequently, to have meant seriously only those parts of his doctrine which an enlightened man of to-day could mean seriously; the remainder (it is a very large remainder) must be either softened and interpreted into conformity with this, or, where that is not possible, dismissed as an inexplicable aberration, or mere mistake. Applied to the question which we have just been considering, this method would lead the critic to select the "equalitarian" side of Plato's teaching, as representing what Plato fundamentally must have meant, because *we* (though we may deny it verbally) assume the principle of the equality of man in all our thought upon moral and political topics. The next step is to assume that whatever in Plato apparently contradicts this principle (in this case, the division into classes), cannot really do so; hence Plato must be interpreted as intending no deeper division between the classes than is compatible with the fundamental equality of their members, no deeper division, e.g. than that between the classes of a modern state.

But to take this step is to falsify Plato. That there should be, in a modern state, a separate class of philosophers, does not imply that they are in any way superior as men to the other members of it; but that is only because in modern states philosophy has not been, as it was for Plato, the only path to a "better life than the political." There had to come another path to such a "better life," and one, further, accessible to all men equally, irrespective of their philosophical capacity or of their position in the state, before the modern idea of the equality of men and the relative subordination of class distinctions was possible. But that conception was one first explicitly uttered in the Christian doctrine that all men equally are capable of participation in Eternal Life. It is a mere historical anachronism to suppose that Plato, lacking the revelation of the doctrine, nevertheless drew the full consequences of it. What is to be wondered at is not that Plato has some passages which are incompatible with the equality of man, but rather that he has some which are not.

One of the worst consequences of the above-mentioned method

of interpreting ancient philosophers, is that it makes it impossible to do justice to the historical importance of Christianity. If Christianity has been, as it has, the most important single influence in shaping not only the practice but the theory of the modern world, we must expect it to have altered men's ways of thinking not only superficially, but fundamentally. What we call an enlightened judgment is a judgment (whether or not of a Christian), nevertheless formed in the school of Christianity. It is not lightly to be assumed of any pre-Christian philosopher, however great, that he was in secure possession of an enlightenment which became after Christianity the common birthright of educated men.

THE MIND'S LOVE FOR GOD

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He upon whom has descended the "amor intellectualis Dei" must make up his mind to walk much alone. In the world of "intellectuals" he is at present "out of the swim," and his work must be done against the prevailing current. And among the generality of religious people, he is regarded as rather a disturbing presence in matters of faith, apt to fall short, apparently, of their own standards in the service of God. "The love of the mind for God" has little popular esteem in English-speaking Christianity. The nineteenth century valued feeling as the chief element in religion, and the emphasis of to-day is on the practical service of the will. But in our tradition, from Colet and the Cambridge Platonists to Westcott and von Hügel, the "amor intellectualis Dei" has produced a line of great men of God, and surely will never be without its witnesses. Their message is a two-fold one. First that every experience of life can be "produced" into an experience of God by an effort of personality in which creative thought and constructive imagination has its part, second that this "love of the mind" is natural in some degree to all men, and an end in itself, giving to each lover an original vision. "It is Origen," writes Dean Inge, "who in words thrilling alike by their humility and confidence, proclaims that 'as the eye seeks the light, as our body craves for food, so our mind is impressed with the natural desire of knowing the truth of God and the causes of what we observe.' "[1]

To see the Holy Spirit at work within the Time Spirit, the striving of God in the turmoil of surrounding circumstance, to discern God as "the persuasive element" in history and nature reaching towards perfection; this is the opening out of that respect for our age which is our one hope of working with its characteristic mentality to realize its possibilities for God. It is in this vision of respect for the present world that intellect joins itself to will and feeling to contend for that which is of God against that which is not of God.

But the "plain man" is far from recognizing that "the love of the mind for God" must be an end in itself before it can have an instrumental value; that a strenuous honesty and nobility of thought, a longing for personal illumination and wisdom, is as vital to healthy Christian individualism as strong emotion and diligence in good works. "It ill becomes us to make our intellectual faculties Gibeonites

[1] *The Platonic Tradition in English Religious Thought.*

—hewers of wood and drawers of water for the will and the emotions," writes Dean Inge in the book already quoted. And St. Thomas Aquinas writes: "Intellectus speculativus est qui, quod apprehendat, non ordinat ad opus, sed ad solam veritatis considerationem."

Fortunately the "amor intellectualis Dei" is in itself an energy and a defence for loneliness. Yet this love is a missionary passion. It desires always to communicate its own experiences and discoveries both from a necessity of its own nature and because it is the perception that all the people of God are called to this perpetual climb to enlarge their seeing of God, and are capable of it in varying degrees. The "amor intellectualis" is not the strained preoccupation of the uncertain "highbrow," but, as von Hügel insists of mysticism, it is an energy in some measure natural to all, a movement of spiritual life from "this world" problems back to their origins of inspiration and meaning, and forward again to "this world" tasks. It is an eager and sensitive receptivity to the intimations of Beauty and Wisdom, and no mere concern with abstractions. "The invisible things are understood by the things that are made," and God may speak from a life, a political movement, or a leaf. It is in part a search for clues to the deeds by which we may know the doctrine. It is in faith that God's word comes to us, in the service of our day, through a personal effort uniting insight and criticism. This unity of insight and criticism is the way of revelation.

The plain man may object that this love requires special equipment. It is true that any spirit once lit by this "amor intellectualis Dei" will feel an urge towards continual self-education and self-development. But that is true also of those whose authentic religion is mostly feeling or will. He who loves God with his mind will probably be driven for fellowship and progress to an increasingly strenuous companionship of books. But this love is not essentially a matter of books, or the study of systematic theology, except so far as these are needed to clear and sustain one's own energy of seeing. Christianity has always held that education is necessary to clear the way, and why should not a man work at his religion if it possesses him, offering the prayer of hard work to the Holy Spirit? But "the love of the mind for God" is not academic study, though it may, perhaps must, use study. We may not "take the lesson for the prize." Dean Inge quotes Whichcote: "The knowledge of divinity that appears in systems and models is but a poor wan light, but the powerful energy of divine knowledge displays itself in purified souls; here we shall find the true land of truth of which the ancient philosophy speaks. To seek our divinity merely in books and writings is to seek the living among the dead. No; seek for God within thine own soul; He is best discerned, as Plotinus phraseth it; by an intellectual touch of Him: we must see with our eyes and hear with

our ears, and our hands must handle the word of life, that I may express it in St. John's words." But once this "amor intellectualis" is established within us, it will make its own living converse with books and friends. The life of the mind is a social life, and though it must pass through stretches of loneliness, it will seek all the companionship it can find.

But in these days, wherein faith in thought itself has grown flickering and feeble, and action and emotions are welcomed as escapes from thought and refuges against reasoning, we must justify the necessity of intellectual activity in Christian individualism before we can make converts to the "amor intellectualis Dei." The mind must win its way across the plain of utility before it can reach the foot of the "world's great altar stairs."

All genuine character calls for some degree of individualism. And all individualism must to some degree rationalize its convictions in order to feel confident of them. An unrationalized faith is often edged with panic. The beliefs of one area of the mind will try to find consistency with what we have reason to believe in other regions of the mental life. Religious beliefs will try moreover to draw into their service increase of vitality from these other beliefs. Central religious experiences will look abroad to scientific and political theories for a congenial "world view," and "downwards" for a technique that will make them workable in living. Central religious convictions will seek for social theories and programmes of good-will.

As Whitehead writes: "From the earliest Greek theologians to Jerome and Augustine: from Augustine to Aquinas: from Aquinas to Luther, Calvin, and Suarez: from Suarez to Leibniz and John Locke: every great religious movement was accompanied by a noble rationalistic justification. You may disagree with the theologians —indeed, it is impossible to agree with all of them—but you cannot complain that they have been unwilling to indulge in rational argument."[1] Intellectual energy is intellectual courage, and to some measure of it all Christians are called. Nor need this thinking be divorced from popular appeal. Everyone desires to be rational, and as Glover says, "Man is incurably rational, he cannot leave his religion alone."[2]

Naïveté in itself is not to be glorified. The simplicity and directness of the unsophisticated good-will is often very appealing. But the dangers surrounding a naïve faith are great and gross—"cocksureness," lethargy, intolerance, obscurantism, and emotional self-indulgence. *Naïveté* can be very brittle, and itself is a limitation of the scope and contact of the faith that it contains. An unnecessary *naïveté* may be a form of infantilism, a failure and a refusal to face the whole task of Christian living and the development of Christian

[1] *Adventures of Ideas*, p. 27. [2] *Progress in Religion.*

character. There is certainly no scriptural justification for the impression that God has a special blessing for the emotions and will that is denied to the mind. The "heart" in the Bible is the symbol of understanding or the conscious personality; there are nearly twenty times as many allusions to it as to the symbols of the emotions. Fixed emotional attitudes are subject to staleness, stagnation, and monotony; divorced from reason they sour into intolerance. Only mental activity can give variety, largeness, and freedom to the spiritual life. We need the mind to transfer the feelings and the will from one place to another. And we need the best that we are capable of in the way of rationalization to win the clean, clear, calm assurance of being honest.

Moreover, if as Plato taught and our Christian religion implies, God is for us the "persuasive element" in the perpetual creation of our world, it is in the activity which discerns that persuasiveness everywhere at work, and joins us with its energies that we are chiefly fellow-workers with God. In that activity reason and example have inseparable parts to play. "Reverence God in thyself," wrote Whichcote, "for God is more in the mind of man than in any part of the world besides."

The claim that "thou shalt love the Lord thy God with all thy mind" arouses many hostilities. The churchman, whose obedience to authority in doctrine is absolute, needs reminding that, in these days when Christianity has again become a "separated" faith, he must rationalize his allegiance if he is to possess it with assurance, and that all his critical and imaginative powers will be required to gather in the spiritual wisdom that his Church brings to him, and to live that wisdom in his peculiar and unique circumstances. The individual who objects that it is unfair to insist on the necessity of a power so unequally distributed as that of the intellect needs reminding that gifts of will and feeling are no less unequally divided, and in these matters also the less gifted, giving all they have of what they lack, must draw for strength and leadership on those more greatly endowed. The emotionalist, who objects that the critical activity switches off the current of feeling, needs reminding of the narrowness and self-indulgence of a faith too narrowly emotional, its dangers of intolerance and obscurantism. Criticism without devotion can only talk "around and about" religion, it is true, but only criticism can purify feeling and intuition and make willing as effective as it can be.

But, it may be asked, has not God made the ultimate truth so simple that it is intelligible to the simplest who approach in faith? So Christians believe. "He that loveth is of God." But if that love can the more fully appreciate the range and depth of the Eternal Wisdom and the better bring that Wisdom to the aid of others by using the intellect and developing the intellect for that use, can it

withhold that offering? And if we can love better through some knowledge of psychology, preventive medicine, literature, economics, shall we omit these powers from our service if we can bring them within our grasp?

There is also an impression among the devout that the "intellectual" is more likely to miss his way than the "plain man." It is true that no one is unprejudiced about anything, and that a man moves in the direction that he faces, but among those who have a disposition towards God, the whole effort of Christian training should be directed to breaking down that artificial and mischievous barrier between the "intellectual" and the "plain man." "The reason of man is the habitation of God," said Abelard, and that saying can be more fully appreciated when we come to explore the positive content of "the love of the mind for God."

But the bitterest grievance against the "intellectual" in religion arises out of the controversy between traditionalists and modernists which is the true religious crisis of to-day. In earthen vessels of antique pattern, in wine-skins hallowed by age, the traditionalist holds the "water of life." He fears that if these are split by the critical action of the intellect or shattered by the ferment of thought, this life-giving water will evaporate. The modernist would point to a perpetual stream flowing from a source which can be reached by climbing. But clinging to his experience in traditional forms, the traditionalist says in effect, using the phrase in its theological meaning, "I'm damned if I'll listen." The controversy is vital, not in the sense that the future of Christianity depends on the question whether there be one Isaiah or three, or even on the issue whether the Incarnation depends on the Virgin Birth or the Empty Tomb.

The issue is crucial whether faith can accept the "open vision" of spiritual insight and common sense, whether inspiration is a perpetual "Now," or whether it must be segregated into some hallowed moments of the past which gave dogmatic finality at Jerusalem, Nicea, Chalcedon, or Trent. Whether faith is the right to stop thinking, or whether living truth requires the perpetual prayer of hard work to the Holy Spirit—this issue sets before us the choice of life or death. Is the Catholic Faith at some moment behind us, or does it beckon in the promise of syntheses ever richer and more profound, and in discoveries new, fresh, and authentic to the individual, call us to an ever-deepening widening fellowship, a more complete possession of the Truth? Of our private world of circumstance and thought we must ever ask:

> Is this our ultimate stage or starting place
> To try man's foot if it will creep or climb,
> 'Mid obstacles in seeming, points that prove
> Advantage for who vaults from low to high
> And makes the stumbling block a stepping stone?[1]

[1] Browning, *The Ring and the Book.*

But is not this process dangerous—this process of questioning habits of thought that give us a sense of security? It has its moments of danger when doubt of the finality of the familiar forms of faith seems like a mist that sweeps across the eyes, a trembling of the ground underneath the feet. In his religious progress the pilgrim may find himself at a ford compelled to wrestle with the Dark Angel of What Might be True. And if the wrestling be faithful it may leave some temporary lameness, some loss of former certainty on certain points. But in this time, one of the great periods of transition in Christian faith, we must stay to wrestle faithfully, crying aloud to our enormous problems like Jacob to the Angel, "I will not let thee go until thou bless me." The danger in such wrestling is rather to the temper of self-confident assurance in the moment than to ultimate faith. He,

> Within whose circle of experience burns
> The central truth, Power, Wisdom, Goodness-God,[1]

may be shaken concerning such matters as his cherished conception of the authority of the Bible, or the claims of his Church, or particular definitions of the Incarnation and Atonement, or his formulae for social justice, but the central vitality of his ultimate belief will gather to itself wisdom more truthful, if less tidy and less assured, out of the struggle. And even the ultimate belief will mean more if it is fought for rather than taken for granted.

Spiritual truth, once discovered, is timeless. Moses' discovery of the righteousness of God is eternally valid, for example, but his limitation of Jahweh to the deity over Israel is not valid against first Isaiah's vision of Jahweh as the God of all peoples. Freed from faulty definition, from accretions of local and period philosophies, from dependence on doubtful historic assertions, "the truth once delivered to the saints" is expanded into new perceptions, gathered up into fresh formulations, to be criticized in their turn.

There is a real conflict of mood between those for whom movement and critical effort is of the very nature of truthfulness and those for whom religion is the emotional enjoyment and the reiteration of what they possess. The thinker pauses and questions confidently, believing the self-communicating Word will speak; the emotionalist wishes to make complete uncritical surrender of intellect and will. The religious life at its deepest and fullest will include both needs —possession of the eternal, and on all its manifestations, the use of those tests of probability, evidence, and insight that are the new and peculiar virtues of our own age. But man is "coined small," and in every individual one mood—motion or rest—will predominate.

The traditionalist often assumes that the modernist cannot be

[1] Browning, *The Ring and the Book.*

humble because he is not submissive to authority, that the new ways cannot have missionary virtue because the old modes have had missionary virtue. To the traditionalist the modernist seems to concern himself with thought and scholarship and criticism rather than with saving and redeeming sinners. The answer is, of course, that in the armies of God the specialist must be allowed to do his own work, and that unless people think you are telling them the truth, and have yourself a hearty respect for truth, they will not allow you near enough to influence them at all. The critic must be used by the missionary, even if the critic is not himself pre-eminently a missionary. But there is no ultimate reason why he should not be. Honesty is an absolutely primary missionary virtue to-day. The last seventy years has seen an immense development of the critical faculty in mankind. No other question arises until we have answered to "What have we the best reason to believe is true?"

The supreme reward of "amor intellectualis Dei" is a hard-won simplicity, clarity, and realism of vision. That is the ultimate answer to the distrust of the "intellectual." The emphasis is on "hard-won." Take the short cut of mere assent and you have a commonplace, a platitude, but with Paul and Aquinas face the full complexity of life to wrest from it its principles for you, its revelations to you, its claims upon you, and you have—maybe still in words long familiar and long accepted—a unique and original discovery. This discovery will be given length and width of meaning by the journey that you have taken, its value and its power to help will lie in the experience through which it has been achieved, it will be given working usefulness by the multitude of its contacts with the facts through which you have journeyed, it will be given confidence and self-respect by the tests to which it has been subject.

He whose service is a rational service believes that the use of criticism within religion has yielded glorious results. It has cut a great heritage of vitality free from those filaments of rationalism which in the past drew into its service the knowledge and theories of the past, but which are now dead with that part of the past which is dead. Such, for example, is the three-storied universe of Genesis and the feudal and Roman law in past theories of the Atonement. This outburst of criticism, this newly developed power of the human mind, has released the fundamental magnanimities of Christian teaching from their bonds, it has recovered the direct realism of Jesus, and is restoring His mind as the dominating influence on Christianity—the test of its past, and the living core attracting to its service the finest thinking of the present, and the promises of the future wherever they may be found. It has restored a hard and honestly won simplicity of faith, the more confident and workable in that it is aware of its own limits, and knows where honest agnosti-

cism must begin. This is the basis for a Catholicism yet to be achieved, for in itself this simple faith is a critical and appreciative approach to every great Christian personality, a means of extracting that which cannot be shaken from every unique appreciation of God in life.

The entrance into this fellowship with past and present, in which there are no barriers of authority or fear, is a going out from closed rooms, an emergence into an air which is always fresh and moving, though winds at times may be stormy, where the light is always from the sun, though clouds may gather and disperse. And if we may change the metaphor, so far from the quest being a departure from humility, the journey finds its characteristic spirit and dynamic in a daring humility. The disciplined submission to evidence on questions of fact, the constant sense of the incompleteness of one's personality, the insufficiency of one's theories, the inadequacy of one's language to comprehend the Reality that is breaking in on one's mind, the sense of something attainable ever beyond each stage of one's thinking—these thrust through every pause and rest of complacency. A worship that understands itself and reflects upon itself is the most profound form of self-discovery. The "stretch" and the "lift" of personality reveals at once its capacities and weaknesses, and in revealing the necessary conflicts summons the energies quickly to those points.

Faith is not the right to stop thinking, the claim to comfort which it appears to so many minds. It is the "testing of things hoped for, the proving of things not seen." Often, it is true, the mind which concentrates itself in an intense effort of reasoning and argument may suddenly emerge into a clear and simple vision of truth. We see the process at work in Browning, and St. Thomas Aquinas set aside his immense controversial labours with the words: "I can write no more; I have seen things which make all my writings like straw." But these visions were given to men who earned them, who fought for them hard and fairly and faithfully. They came to men who sought not comfort, but truth.

The mind is seldom avoidable in God's service. It had better be enjoyed.

Thus far we have been writing of the instrumental value of "the love of the mind for God." But this "instrumental" joy is not quite the same thing as the "amor intellectualis Dei." We have been cutting our way towards the mountain through the undergrowth of the plain; it is time that we began our ascent.

Where, then, dwells the happiness of "the love of the mind for God"? First, let us take the joys of the ascent. The climb begins in a calm love of thought and a serene faith in thought as the means whereby the "Logos," the Reasoning of the Universe, discloses

itself to man. Man's mind can measure the diameter of stars some hundreds of light-years away because, as Lord Haldane points out in his *Reign of Relativity*, there is a reasoning in Nature akin to our own. We find the same idea in the work of Eddington and Jeans. Therefore, says Lord Haldane, we should trust our religious intuitions to give us an insight into the nature of Reality. And these, at their highest, converge. "The saints do not contradict each other," says Dean Inge. "The great saints have been great metaphysicians," says Joubert. When we contemplate the work of the great poets, mystics, and philosophers, whose illuminations are of irresistible authority for us because of the responses which they evoke in us, it is hard to resist the doctrine of Henry More, the Cambridge Platonist, "that there is faculty in the soul which he calls Divine Sagacity, whereby the truth may be known by intuition. Divine Sagacity is evidently much the same as the Neoplatonic Nous. It is that organ which all possess, but only a few use."[1]

The irresistibility of Truth, especially when it is revealed as beauty, confirms this belief that we have the power to know God by a natural affinity. "The Truth of Supreme Beauty lies beyond the dictionary meanings of words," Whitehead writes. "The quest of truth is justified for him by the faith that it will reveal Beauty at the uttermost depth of Reality."[2] The sense of motion and expectancy in the discovery of beauty is fulfilment and peace. This calm irresistibility of Truth as the illumination of Goodness and Beauty, as the invincible affirmation of our affinity with Goodness and Beauty is supremely expressed by St. Augustine. "Thou didst strike my heart with Thy word and I loved Thee."[3] And again: "I entered the secret chamber of my soul, and behold the light that never changes, above the eye of my soul, above my intelligence. It was altogether different from any earthly illumination. It was above me because it made me, and I was lower because I was made by it."[4]

But the saints cannot do all the work for us that is necessary to make their discoveries our own. "The intermediate stage is a process of making our own by free inquiry the spiritual truth by which we decided, through faith, to stand," writes Dean Inge.[5] The final stage is the vision of our own. This vision must be honestly won, even if honesty makes it incomplete. He who feels the world's sin and pain so keenly and exclusively that he is prevented thereby from the faith that God is Love is perhaps nearer the kingdom than he to whom this faith is merely an emotional refuge. To see "through a glass darkly" God as Love is to see "that there is no evil so great

[1] Inge: *The Platonic Tradition*, p. 57.
[2] Whitehead: *The Adventure of Ideas*.
[3] *Confessions*. [4] *Ibid*.
[5] *The Platonic Tradition*, p. 18.

but that the effort to overcome it may create a good greater than would have been possible if the evil had never been there."[1]

The "amor intellectualis Dei" is not the same thing as the delight in speculation for its own sake, for it is at once a quest and an arrival. It is indeed permeated by faith in God which is an assurance of the ultimate unity of goodness and power. But such an assurance makes one free of the whole world of speculation. The athletic delight in speculation, the expectancy of intellectual curiosity, the joyous shocks of discovery offer themselves on every side. For one can learn incessantly from all strong thinkers, however much of their systems we may reject. It is not necessary to accept the whole thesis of St. Thomas Aquinas or Bertrand Russell to be able to gather in joyfully their flashes of inspiration and insight.

But, it may be objected, is not this world of speculation a region of chaos and contradiction? It is that only to a superficial view. One cannot reconcile the beliefs of Plato, Augustine, Descartes, Kant, Hegel, William James, and A. N. Whitehead, for example, into a tidy and comprehensive system of doctrine. They are using different "picture languages," they are starting their inquiries at different points and working upwards from different problems; some of their ideas and perhaps nearly all their "pictures" are incompatible, in that as they stand they cannot be pieced together in one vision of Reality. But each thinker is dealing greatly with the witness of life to that which lies beyond life. The fundamental idea of each of the great philosophies is a beam of light revealing patterns and meanings in some region of the welter of daily experience. Each central thesis, however inconsistent with the others, had best be accepted as a basic discovery concerning the nature of the Universe. And the seeker for the fullness of the truth of God can believe that these beams of illumination, split into diverging rays by the crystals of personality, derive from the white radiance of eternity and meet in a realm from which they come beyond our seeing.

> O Thou as represented here to me
> In such conception as my soul allows—
> Under thy measureless, my atom width!—
> Man's mind, what is it but a convex glass
> Wherein are gathered all the scattered points
> Picked out of the immensity of sky,
> To re-unite there, be our heaven for earth,
> Our known unknown, our God revealed to man?
> Existent somewhere, somehow as a whole;
> Here, as a whole proportioned to our sense.[2]

"Perfect love casteth out fear." Once we possess this assurance

[1] Pringle Pattison: *The Idea of God.*

[2] Browning: *The Ring and the Book: The Pope.*

of the ultimate unity of goodness and power, we can go down with any cause that has virtue in it, in a calm assurance. We can watch or share, with tranquillity, in the breaking up of "thought pictures" and ideas that have brought spiritual life to millions for centuries, well knowing that better pictures may be constructed out of the discarded materials. For faith in thought as the mediator of truth goes with the realization of the inadequacy of language. Our language is a mosaic of physical images. It can never do full justice to any idea outside of the handling of material things. And the central convictions of religious experience, such, for example, as the belief that God is Love and that magnanimity is the voice of truth and God's own common sense in human affairs, and that God is to be discerned "in the face of Jesus Christ"—these are always throwing out filaments of rationalization, linking them to the best social theories and the best scientific opinion of our day. Such filaments are always breaking, but they will grow again to make contact with the new working theories reshaping themselves out of the obsolescent ones. But religious thought to-day is more cautious in committing itself to any one scientific world view, and gratefully and greatly stimulated as it is by the changing temper and the transformed philosophic outlook of science, it receives the ideas of Whitehead, Eddington, and Jeans into its own core of illumination, and does not try to write them into a formal and classic theology.

The changing temper of science has had this great effect on the "amor intellectualis Dei." It has taken out of religious thinking the heat and the hardness that belonged to the time when science presented, with uncompromising dogmatism, a mechanistic "world-view" intolerant of freedom and responsibility, and a view of human life as internecine struggle which denied to goodwill any status in the nature of things. Then for a time the only course that seemed possible to religious people was to harden the shell of traditional theory which enshrined their experience of deeper things. There are many and great difficulties to be resolved in the attempt to fashion a new world-outlook that will reconcile the findings of a religion with a scientific philosophy, but "the universe begins to look more like a great thought than a great machine."[1] It is certainly easier to-day for a man thinking his faith to think calmly and candidly as an "intellectual gentleman."

But the "amor intellectualis Dei" does not consist alone of the athletic joy of speculation. There is open to it an historic enjoyment, disciplined but eager for the companionship and vitality of the past. Within the Bible itself we may bring close to us by modern scholarship the dusty roads of Galilee, the figure of the Master, the great personalities of the Old Testament, and the historic crises of faith

[1] Jeans: *The Mysterious Universe.*

from which they spoke. And beyond the Bible there is a line of noble personalities carrying a world of splendid beauty and sublimity to our own day. It is time that some scholar dug out and collected the gleaming gems of thought from the Fathers and the mediaeval saints.

Yet another mood of the "amor intellectualis" is the delight of appreciating critical scholarship so well described by Francis Bacon: "For myself I found that I was fitted for nothing so well as for the study of Truth; as having a mind nimble and versatile enough to catch the resemblance of things (which is the chief point), and at the same time steady enough to fix and distinguish their subtler differences; as being gifted by nature with desire to seek, patience to doubt, fondness to meditate, slowness to act, readiness to reconsider, carefulness to dispose and set in order; and as being a man that neither affects what is new nor admires what is old and that hates every kind of imposture. So I thought my nature had a kind of familiarity and relationship with Truth." All these qualities are required in the tremendously difficult task of working out a technique for the eager spirits who strive that the principles of Christianity may prevail in the complex turmoil of modern political, social, and industrial life. These worship a God "whom to serve is to rule."

All these, then, are the athletic joys of the ascent—the quiet faith in thought, the absence of fear, the delight in the widening views, the transcending of past achievement, the acquired instinct of soundness directing the placing of the feet, the freedom of the fellowship of climbers, the clear, unobstructed view which rewards the summit—"the naked intuition of eternal truth which is always the same, which never rises or sets, but always stands still in the vertical, and fills the whole horizon of the soul with a mild and gentle light."

In what words shall we attempt to define that vision? There we shall find God as Friend—not an Individual concealing his face, or a venerable Figure with a white beard, but Personal in the sense of being the Answer to Personality. And the Answer thus seen—clear of thronging obscurities, but making all detail luminous, pouring in clear sunshine upon the whole landscape of human life and affairs, and enlightening all who will look upward—is that God is Magnanimity. To the lifted eye the vision is one of Absolute simplicity and peace, to the eye following down, the light from this vision is the truth shining through all the turmoil and confusion of human aims and occupations. Herein the play of shadows mark the points where this light is interrupted and refused. We cannot remain in the clear glow. For the full enjoyment of the "amor intellectualis Dei," the intellectual part, cannot be the whole of life. The will and the sympathies, the duties and affections must mediate it and pay for it. We must rise from the love of life and nature, in its striving

detail, to the clear vision of God, and return to this faithfulness again, seeing, with the vision we have won, God in the patterns of the dawn, in a new stage in the development of central banking, in a piece of hard-won reforming legislation, in a dusty bit of faithful administration.

I do not think this ascent and descent has ever been described so wonderfully as by Plato in the *Symposium*; where Diotima speaks (the translation is Bridges'): "He who has been instructed thus far in the science of love, and has been led to see beautiful things in their due order and rank, when he comes toward the end of his discipline will suddenly catch sight of a wondrous thing, beautiful with the absolute Beauty;—and this, Socrates, is the end of all those earlier labours;—he will see a Beauty eternal, not growing or decaying, not waxing or waning, nor depending on time or circumstance or place, . . . but Beauty absolute, separate, simple, everlasting; which lending of its virtue to all beautiful things that we see born to decay, itself suffers neither increase nor diminution, nor any other change. . . ."

"And this is the right way wherein he should go or be guided in his love; he should begin by loving earthly things for the sake of the absolute loveliness, ascending to that as it were by degrees or steps, from the first to the second, and thence to all fair forms; and from fair forms to fair conduct, and from fair conduct to fair principles, until from fair principles he finally arrives at the ultimate principle of all, and learns what absolute beauty is. Are you not convinced that he who thus sees beauty as only it can be seen will be specially fortuned? And that since he is in contact not with images but realities, he will give birth not to images, but to very Truth itself? And being thus the parent and nurse of true virtue it will be his lot to become a friend of God, and, so far as any man can be, immortal and absolute?"

Augustine, in his great account of the mystic vision at Ostia, deals faithfully with the intellectual part in that heavenly vision: "We went on to explore in turn all things material, even the very heaven where sun and moon and stars give light upon the earth: and thus ascending by meditation and speech and admiration of Thy works, we were drawing yet nearer and had come to our own minds, and left them behind, that we might arrive at the country of unfailing plenty, where Thou feedest Thy people for ever in pastures of truth; there where life is the Wisdom by which all those Thy works are made, that have been or shall be; Wisdom uncreate, the same now as it ever was, and the same to be for evermore."

Thus lifted by successive appreciations of the Logos, the Reasoning of God, we are drawn to God Himself. Through this loving, eager, confident, original wakefulness of the mind, "the Lord shall be unto Thee an everlasting Light, and thy God thy glory."

RUSSELL AND McTAGGART

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In his Introduction to McTaggart's *Philosophical Studies*,[1] Dr. S. V. Keeling complains that in the interests of a prejudice in favour of science and scientific methods, Russell and his followers have denied the possibility of solving metaphysical problems without giving any philosophical reason for this proscription. And by "metaphysical problems," Dr. Keeling seems to mean (as against Russell and in agreement with McTaggart) ethical problems about the amount of good and evil in the world, the nature of human beings and their destiny, the hopes of men about immortality, and hence the "ultimate analysis of Time," etc.[2] Science is not concerned with such problems, and moreover it is the business of philosophy to "justify" induction and cannot itself employ a scientific method. Dr. Keeling therefore urges a return to the rationalism of McTaggart and the attempt to solve such problems by the deductive method. I want to say why this seems to me impossible and why such problems are insoluble unless they can be interpreted empirically and left to the investigation of the special sciences. I shall refer first to the most important feature of present empirical philosophy, then discuss metaphysical and other deductive systems, and finally dispute McTaggart's claim that the Self *must* be known by acquaintance and not by description, which Dr. Keeling regards, mistakenly, as it seems to me, the final refutation of this part of "positivistic phenomenalism."[3] By this procedure I do not intend to justify or defend analytic philosophy but merely to re-compare its method with that of McTaggart. I do not wish to maintain that anyone can be logically compelled to adopt any particular method in philosophy—or in anything else—indeed, one of the questions at issue is the nature of the *a priori*, and the sense in which any proposition *must* be accepted.

[1] *Philosophical Studies*, McTaggart (edited S. V. Keeling), Arnold, 1934.

[2] *Op. cit*, Introduction, pp. 11, 16.

[3] I have not discussed "the problem of induction" or the question of "justifying" the methods of science. It seems to me a special problem of logic, and I cannot see how its solution can be advanced by recourse to metaphysical theories about the non-temporal nature of "ultimate reality" since temporal order is of the essence of causal connection and inductive generalization. It may be indeed that there is no "problem" here at all, but that as Ramsey thought (*Foundations of Mathematics*, p. 197) "induction is one of the ultimate sources of knowledge as memory is." It is certainly difficult to see how induction can ever be "justified" by deduction, without ceasing to be induction.

It seems a pity that in concentrating on some of the more obvious mistakes of Russell, Dr. Keeling completely ignores later developments of the position which he describes as "positivism, overweening phenomenalism, and mere patching up of Hume."[1] Russell's use of the term "scientific method" in the sense in which scientific method is to be introduced into philosophy is certainly not very clear. It cannot be the business of philosophy to formulate natural laws or make generalizations for the purpose of predicting future experience. If this were so, then however "general" its problems were[2] philosophy would just be another inductive science. But Russell identifies scientific method in philosophy with the "logical-analytic method" which has been developed and applied by his followers[3] and is not inductive. Nor is it deductive, but it is a means of elucidating the meaning of expressions. Thus the *fundamental* difference between present criticism of dogmatic metaphysics and that of former positivism and Kantianism is the recognition of the part played by *language* in the setting and attempted solution of philosophical problems. McTaggart asserts that feeling as well as intellect must be allowed to set philosophical problems, though only reason may solve them,[4] but what he did not consider was whether problems in philosophy are not frequently set by neither feeling nor reason, but simply by a misuse of language. This was first most clearly shown by Russell's Theory of Descriptions which dissolved many puzzles about subsistent non-existents. All philosophers use language, but none, until recently, has philosophized about it very seriously. But what leads us to regard language as the key to the solution of all philosophical problems? Not a perverse phenomenalism nor a contempt for reason, but simply the practice of philosophers themselves. For it would be agreed that there is a sense in which philosophers do not discover new facts, as scientists do, or dispute the existence of anything at all. And this is shown by their behaviour and their use of ordinary language. A chair may "really" be a set of God's ideas or a mode of the eternal attribute of extension which manifests the perfect nature of Substance, but whichever view I hold about its "real" nature I shall use the word "chair" in ordinary life in exactly the same sense as does the plain man, for whom a chair is "something to sit on." The question

[1] *Op. cit*, pp. 17, 24.

[2] *Mysticism and Logic*, B. Russell, p. 110, "On Scientific Method in Philosophy." Russell distinguishes between a scientific and a philosophical problem by the fact that "A philosophical problem must be general." It must not be limited in application to a particular set of events or objects in any particular portion of space and time.

[3] Cf. writings of J. Wisdom, L. S. Stebbing, A. J. Ayer, etc.

[4] *Philosophical Studies*, Introduction, p. 11.

then arises, may not these different philosophical theories be merely different "languages" which may or may not be applied to experience, and not expressions of any discovery about the "real" nature of a chair, which is never given in experience? This seems to be confirmed by the efforts of philosophers themselves to explain how we can "misperceive" so constantly a set of God's ideas as a material object. That we do thus see a set of ideas as extended without ever discovering the fact, it is felt, must be accounted for. But if we consider the ordinary use of language, this is seen at once to be a pseudo-problem or else the words "error" and "illusion" are being used in senses which have not been explained. For by "error" and "illusion" we mean something which can be corrected by further experience. When I know that what I believed was a ghost is "really" gauze and coloured light, I have discovered my error and shall alter my behaviour accordingly. But when I have "discovered" that a chair is "really" a set of God's ideas, I have discovered nothing which alters my behaviour in the least. In what sense, therefore, was I previously in error?[1] There seems, then, to be no genuine choice between these philosophical languages at all. This will become clearer when we discuss the connection of McTaggart's system with empirical fact. Language is an instrument whose use is learned by means of ostensive definitions and which is understood primarily in terms of what is thus given in direct experience, sensible or introspectible. The uses and possible uses of words are expressible in definitions which may be regarded as "rules" similar to those of

[1] It is perhaps needless to point out that this is an entirely different position from that which arises with scientific "imperceptibles." That my table is composed of atoms and electrons is a statement which can be verified. It is a way of saying that if I put my table in such and such circumstances certain phenomena will result. The use of imperceptibles in science is a technique for dealing with change, i.e. for connecting, e.g. a square, brown object with a heap of ashes when my table has been burned. Such hypotheses cannot be used to deny the existence of bodies as ordinarily perceived without denying their own foundations. It is another linguistic trap that we express such a proposition as "This table is a collection of whirling atoms" as if it were of the same form as "This table is brown" and so convey the impression that the latter contradicts the former and expresses a continual misperception of it as the "real" scientific nature of the table. That such a view is mistaken we can discover only by considering how we do in fact use such propositions and what is their function in our language. We have seen that the function of the former is to enable us to predict what will happen when this table is brought into certain causal connections with other material objects, not to prove that it is not a material object at all. The function of the latter is to describe what is given us in immediate sensible experience. Or if it is a hypothesis (as the logical positivists sometimes affirm) it is one of entirely different type from the former. The snare of the metaphysical proposition "A table is a set of God's ideas" is that it looks like the scientific proposition but performs no such function of enabling us to predict future experience.

grammar, for the correct use of such words within a certain context. So that when McTaggart bases his proof that Time is unreal on the assumption that "*x* is present," "*x* is past," "*x* is future" are of the same form as "*x* is white," the reply is to see that these propositions are used differently in our language, which reveals their different "grammars" or rules. To confuse them will not result in a startling proposition about the world, viz. that there are no temporal facts of the form, "My birth is past and my death is future," but merely in saying nothing, or in laying down a new rule whose use has not been explained to us. The situation is comparable to that of a man who tries to play draughts by treating some of the pieces as chessmen and moving them accordingly, while moving the rest in accordance with the rules of draughts. The result will either be no game at all, or a new game whose rules must be explained and will not of themselves elucidate the rules of chess and draughts. To the analytic philosopher it seems more probable that philosophers are misunderstanding the use of language when they come to paradoxical conclusions than that there is anything "more real" than ordinary experience or that pre-existence and immortality can be mathematically demonstrated. Neither Russell nor his followers wish to deny categorically that metaphysical problems have meaning; they ask what is it they do mean. No one can give a language sense except its users, and if metaphysicians can give such sense to "Time is unreal," "God exists" that we can see the connections of these expressions with those of ordinary language, then metaphysical propositions will have sense, but they will have ceased to be metaphysical. For we so use language that a proposition whose truth or falsity cannot be tested in experience is not regarded as giving us information about the world at all.

McTaggart defined philosophy as "the systematic study of the ultimate nature of reality,"[1] and the object of such study, as we have already seen, was to justify a religious belief, "a conviction of harmony between ourselves and the universe."[2] This requires knowledge of everything that exists, and of the relation between ourselves and other existents. But this inquiry seems to start with a linguistic fallacy. For how is the phrase "the universe" being used? It has a substantival air, and the universe is then regarded as a substance and a subject of predicates by McTaggart, so that the phrase is put linguistically on a level with "the Houses of Parliament" and "The Bank of England," while to see that they are used differently one need only ask how we should discover the truth of propositions in whose expression these phrases occurred. If, however, "the universe" is a shorthand expression for "everything that exists" it does not seem sensible to say that there is a feeling of harmony

[1] *Op. cit.*, p. 273. [2] *Ibid.*, Introduction, p. 10.

between me and the Falls of Niagara or the inhabitants of New York, whom I have never seen. Yet these are presumably among the things that exist. What I wish to consider, however, is the method by which McTaggart proposes to justify this conviction and to obtain knowledge of everything that "really" exists. He cannot do so by examining everything that exists, nor by induction, for that gives only probable knowledge about what characteristics will be revealed in the future to sense experience and introspection, and what is required is certain knowledge about what "ultimately" exists. The only alternative is an *a priori* method. So, despite Kant, McTaggart repeated the attempt to deduce from so-called empirically certain propositions and definitions what ultimate characteristics *must* be possessed by everything that exists. He did not, however, examine the nature of this "must," but assumed that his conclusions would be accepted as giving certain knowledge about the world. This is precisely what has been disputed by the logical positivists. We said that a proposition will give us information about the world if its truth or falsity can be empirically tested. There are, however, some propositions which cannot be so tested, which we call *a priori*. If $2 + 2 = 4$ gives us information about entities which are Numbers, we can certainly never discover this. Nor do we know anything about the weather if we know only that it is either raining or not raining. The propositions of logic and mathematics, like definitions and other symbolic structures which cannot be denied without contradiction, may be regarded as giving us rules in accordance with which we may use the language of experience. Thus $2 + 2 = 4$ does not give us a certain truth about Numbers, but shows us that it will be sensible to say that if there are two people in this room and they each have two feet, then there are four feet in this room, and that it will be nonsense to say there are five feet. To say there *could not*, therefore, be five feet in this room is quite different from saying that on account of its altitude there could not be a monastery at the top of Everest. The latter proposition may be tested in experience and would be falsified by taking oxygen to the top of Everest, but if Mill's demon added one foot to every two pairs our arithmetic might be inconvenient, but would not be false. That is to say, I tell you nothing about the nature of feet by saying that if there are four of them then there are $2 + 2$ of them, but merely apply the rule for substituting one set of signs for another. Similarly, the principle of the syllogism gives us a rule according to which we say Karl Marx *must have been* discontented because he was a socialist and all socialists are discontented. This does not assert a mysterious logical connection between socialists and discontent, for whether all socialists are discontented we can know only by experience. The syllogism shows that we have framed a

language which allows us to state the conclusion when the premisses have been stated, or understood. Russell and others have shown that there may be many different principles of inference in accordance with which different "languages" or symbolic systems may be elaborated which may or may not be applicable to experience, but the propositions in them will not be any the less *a priori* and certainly true. This may be a mistaken view, but at least some examination of the *a priori* might be expected of philsophers who advise us to return to the deductive method for the solution of philosophical problems. It does seem, however, absurd to say that anything *must* be the case which I cannot control, but I cannot control what I shall experience, but only the language which I choose as most convenient to apply to it.[1]

This view certainly seems to be confirmed by considering the nature of deductive systems. A deductive system as developed from primitive propositions in accordance with rules or principles of inference and substitution is completely abstract.[2] It may be developed from a proposition of the form, "Take a class of elements K and a relation R such that, etc." Whether it can be interpreted and applied in experience will depend upon whether there are objects related by relations having the properties specified. Since its application is so limited, it is not surprising that all deductive metaphysical systems so far have ended by denying reality to most of common experience. But nothing follows logically about the existence of things to which a deductive system does not apply. They are certainly not thereby made illusory. It is true that the temptation to think this is so is strong, even in science, when experiences of colour and sound are dismissed as "epiphenomena" because propositions about them cannot be included in the system of physical science, but that is just a mistake. The truth is that to say a deductive system "applies" to the facts is to say that it gives a systematic language which enables us to make predictions, but the objects to which it applies are not thereby more "ultimate" or more real than those to which it does not. So regarded, a deductive system is like any other language in which some things can be said and some cannot.

But philosophers would not accept this view of metaphysical deductive systems. They are not content to say that "If anything has the characteristics *a*, *b*, *c*, then it will have the characteristics *d*, *e*, *f*," they want to say that "Only that which has the characteristics *a*, *b*, *c*, can exist at all, or "Everything which exists (or really

[1] For this view of the *a priori*, cf. Wittgenstein: *Tractatus Logico-Philosophicus*, Kegan Paul, 1922. Carnap: *The Unity of Science* (trans. M. Black), Psyche Miniatures, 1934, 2s. 6d. Carnap: *Philosophy and Logical Syntax*, Psyche Miniatures, 1935, and other writings of the Vienna School.

[2] Cf. L. S. Stebbing, *Proc. Aris. Soc.*, 1932 and 1933.

exists) must have the characteristics *a, b, c.*" They would deny that a metaphysical system was abstract or that it could be applied in the ordinary sense. Rather it claims to describe for us *the* system of the universe. But it cannot be proved that everything *must* have the characteristics *a, b, c,* unless it is known that at least something *does* have the characteristics *a, b, c* (or at least some of them). It is assumed therefore that if the primitive propositions of a metaphysical deductive system include an alleged self-evidently certain existential proposition such as "I exist" or "God exists," then the system will be a valid revelation of the characteristics which *must* be possessed by everything which exists. What happens, of course, is that the system is developed in terms of such propositions and what cannot be deduced from the characteristics of "God" or of "I" is "unreal." The only possible alternative would be to include primitive propositions of *every* type of object whose existence can be empirically certified, and it is not suggested that this has been or could be done in the present state of knowledge. But it is surely absurd to legislate for the universe from a limited number of propositions and the deductions from them. Non-Euclidean space is not "unreal" because its characteristics cannot be deduced from the primitive propositions of Euclid but from those of some other system, nor are matter and sense data "unreal" because McTaggart's Principle of Determining Correspondence cannot be applied to them. It is evident, then, that a metaphysician cannot determine what *must* exist except in terms of properties with some of which he is already acquainted, i.e. which do exist. But short of examining everything in the world and knowing what will happen to-morrow, what can be meant by saying that any qualities with which I am acquainted *must* continue to be experienced? It seems even more clear that in saying that only things which have certain properties are "real" or "exist," the metaphysician is merely telling us how he intends in future to use the *words* "real" and "exist"; he is not substituting a colony of souls or a set of God's ideas for a solid square table, nor proving that the Battle of Waterloo is not really past. He is giving us a new notation in which to express these facts, and we must ask whether it is of any use. What can we predict about the behaviour of a table from knowing that it is "really" a colony of souls and how can such behaviour be tested?

McTaggart is indeed a very good example of this metaphysical procedure,[1] He begins by asserting that "Something exists" is certainly true. If this is doubted or denied, then the doubt or denial will certainly exist. But these are mental events. It appears, then, that the type or model of that which exists is a mental event. I am not sure whether McTaggart intends to assert this, though the develop-

[1] Cf. *Op. cit., Essay XI,* p. 273, *et seq.*

ment of his system seems to confirm it. He appeals again to perception in asserting that what exists is differentiated. Existence, he maintains, is a quality, though everything which exists has some other quality besides existence; the notion of quality entails that of substance (i.e. on our view that whenever he uses the *word* "quality" he will use the word "substance" as correlative to it) and that certain things must be true of substances and their parts, e.g. they must be related by the relation of Determining Correspondence,[1] and cannot exist in time. He then seems to attempt to apply his system, for he says:[2] "Only three sorts of substance appear to be given us in experience—matter, sense data, and spirit. We do not know and we cannot imagine any others." He decides that the parts of matter and sense data cannot be related by Determining Correspondence, but that those of selves (or spirits) and their perceptions can. He concludes, therefore, that all that exist are selves and their perceptions, none of which exists in time or occurs at a time though they have certain relations to each other which are misperceived as temporal. Matter, sense data, judgments, assumptions, images are equally unreal. Now I was aware of none of this when I judged that "Nothing exists" and thereby implied the existence of a certain belief and the truth of the proposition "Something exists" as an axiom of this system. In asserting that "Nothing exists" or even that "I exist," I seemed to be making a judgment which occurred at a time, but in developing his system McTaggart denies that these characteristics which perceptually certified these occurrences really do exist. How, then, can such beliefs or judgments justify the assertion that "Something exists" as a primitive proposition and the existential basis of this system? The reasoning seems to be of the form, "I am acquainted with X, which has the characteristics *a*, *b*, *c*, therefore something exists, but the characteristics *a*, *b*, *c* do not exist." McTaggart's reply, I suppose, would be that in asserting that "Something exists" I am aware of only one "ultimate" characteristic, that of "being existent," and since the existence of any quality implies that of a substance which has the quality, therefore X exists although its other qualities revealed to perception are unreal. But in what sense is the characteristic of "being existent" given in experience at all? To discover whether there is a book on my shelf I do not look for an instance of "being existent" but for instance of a certain shape, colour, size, etc. This is, of course, a truism since Kant, but it seems

[1] The relation of Determining Correspondence is such that sufficient descriptions of the primary parts of a substance A (which include descriptions of their relations to each other and to A) will determine sufficient descriptions of the parts of the parts of A throughout an infinite series. Cf. *Op. cit.*, p. 279.

[2] *Op. cit.*, p. 283.

important to reiterate it in this connection since, unless existence is a quality with which I am directly acquainted, there is no perceptual basis to McTaggart's system at all for all other qualities of which I am directly aware when I say that something exists he subsequently proves to be unreal. And to assert that existence and reality are predicates is again to treat "this exists" as of the same form as "this is white," which certainly requires justification and receives none from McTaggart. To what, then, does his system apply?

The process of applying symbolic systems to the facts is somewhat obscure, and I do not profess to know its complete analysis. But what does seem to be clear is that whether any other system applies to anything or not can be *tested.* If Euclid's geometry applies to perceptual space, then the angles of any figure which I call triangular will measure approximately 180 degrees, and this can be discovered by measuring them. Both the figure and its measurements are given in perceptual experience. But if something exists, i.e. is given in experience for McTaggart then, as already pointed out, the characters by which it is known to exist are proved to be illusory, while from the fact that it exists (or has the pseudo-characteristic of "being existent") conclusions are drawn about its "real" characteristics which can never be tested at all, viz. that it does not exist in time and is a self or a perception of a self, though it "appears" to be a red sense datum. Nor can the existence of such characters be indirectly verified as can the hypotheses of the physicist about electrons or of the psychologist about the unconscious. It is very difficult to see in what sense the metaphysician claims to be giving us knowledge about the world or how his conclusions are linked to the empirically certified proposition which is one of those from which he starts. A metaphysical deductive system is a logical hybrid, not completely hypothetical, and yet incapable of being intelligibly applied to what it is claimed does exist. But if "deductive system" is used for a metaphysical system in the same sense in which it is used, e.g. for a system of geometry, then its conclusions, deduced with the help of the perceptual proposition on which it claims to be based, must themselves be empirically verifiable, and there will then be no question of anything "more ultimate" than ordinary experience. The system will apply to some facts and not to others, that is all. Otherwise, we are merely being given a set of rules for the translation of sentences about material objects and temporal facts into sentences about misperceptions of souls and positions in an eternal "C" series without being shown what purpose such a translation serves. Its only possible justification would seem to be that it gives certain emotional satisfactions about the "harmony" of the universe with human beings. If "deductive system" is being used in some other sense in which

such a system does give us knowledge of what is beyond empirical observation, we have not been told what that sense is.

Meanwhile, we return to the position of Russell that the construction of a system adequate to the whole of what exists must depend on the development of the special sciences and cannot be obtained by *a priori* reasoning from inadequate premisses.

In claiming that his system applied to selves and their perceptions, McTaggart asserted that each person knows himself by acquaintance, of which he put forward an independent proof[1] which is regarded by Dr. Keeling as a conclusive refutation of positivism. This seems to me to be mistaken. McTaggart's argument is as follows: I understand many propositions in which the word "I" occurs, and I know that some of them are true. I must, then, know the constituents of such propositions. These constituents must be known either by acquaintance or by description. If I know myself only by description then in asserting that "I am hungry," two descriptions will be involved, viz. "the person who is hungry" and "the person who asserts that she is hungry." How, then, could I know that these two descriptions belong to one and the same person? Not by a further description, for that would lead to an infinite regress of descriptions, e.g. that I knew myself as "the person who asserts that in asserting that she is hungry she is the same as the person who is hungry," *ad infinitum*. But, *ex hypothesi*, I do know each of the constituents in the true proposition in which the word "I" occurs. I must then directly perceive myself. I must know by acquaintance that I am the person to whom the descriptions apply. Philosophers like Hume and Russell, who hold that the self is a bundle of states or a logical construction out of its states, must hold that the self is known only by description and are led into the infinite regress described above.

If I have stated McTaggart's view correctly, it is certainly not easy to see what sort of question he is asking. We know of course what it would be like for me to be hungry and for someone else to say that I am hungry. And I can tell a lie. I can say "I am hungry," when in fact I am not so that I know that the proposition "The person who says she is hungry is the person who is hungry," is false. But what sort of proposition would it be to say "I am hungry, but perhaps it is not really I who assert this"? Yet this is the proposition that McTaggart seems to think might be true unless I know myself by acquaintance. The positivist philosopher might reply that when McTaggart claims that I must know myself by acquaintance he is not giving us information about a simple object known in a peculiar way, but he is pointing out that our rules for the use of "I" are such that this absurd sentence is excluded from our language. We so use the word "I" in English that it would be nonsense for me

[1] *Op. cit., Essay III*, on "Personality," p. 69 *et seq.*

to *say* "I am hungry, but perhaps it is someone else who is asserting that I am hungry." To say that if this is true, then I must be directly aware of an object to which two descriptions apply is misleading since it suggests that there is some independent evidence of the existence of such an object when in fact there is none. My evidence for the fact that I am directly acquainted with a colour is not merely that I *say* "I see red," but also that I could point to an example of the colour and say "That is the colour I am seeing," but I cannot point to "I" or describe it. I can only use the word "I" in certain contexts.

It is true that McTaggart asserts that what I perceive when I perceive myself is the simple and indefinable quality of personality. So that I always know when I know "I" that I have the simple and indefinable quality of "being a person," though presumably, for McTaggart, I am something other than such a quality. But is the proposition "I am a person" a genuine proposition at all? What information does it give us? It would surely be meaningless to say "I am not a person" as it would be to say that "Red is not a colour" or "A sound has no pitch." We do not know what situations in the world would make such propositions true as we do, e.g., know that if the Prime Minister is in Scotland the proposition, "The Prime Minister is not in London," will be true. It makes sense to say the Prime Minister is in London because he may be elsewhere, and it is possible that we should discover where he is, as we cannot discover a sound without pitch or an "I" that is not a person (on this view). But if it were *inconceivable* that the Prime Minister should ever leave London, then it would give no more information to say that the Prime Minister was in London than to say he was in his skin, for a person who understood the phrase "the Prime Minister" would *ipso facto* understand it as used for "object in London."

It appears, then, that an expression such as "Red is a colour" does not express a proposition about the possession of a property "colour" by something called "Red," but one about the *word* "Red," viz. that it is a colour word and is used in accordance with our rules for colour words as distinct, e.g., from sound words so that to say, "This shade of red has pitch E flat," will be nonsense. And similarly for the proposition about "I." To say, "I have the unique and indefinable quality of being a person," is simply to say that "I" is a "human object word" or "person word" if that be preferred, i.e. that it is combined with other words in certain ways determined by the rules of our language; it does not give us information about an entity beyond the reach of empirical observation or introspection which is "myself." To say that "I know myself by acquaintance," or, as McTaggart says, "I *must* know myself by acquaintance," means that I do or intend to use the word "I" according to different

grammatical rules than those according to which I use the words "sun," "chair," or "the first English Queen." For it is quite obvious that it is not indisputable that the self is known by direct introspection. That it is has been asserted by some philosophers and psychologists and denied by as many more. That is why McTaggart tried to settle the matter by logical proof. But we have seen that logical proof shows something about the rules of language and not about the facts to which the rules are applied. The positivist philosopher, therefore, will remain quite unconvinced by McTaggart's claim to have settled the matter by certain knowledge of a substance whose existence is not empirically verifiable.

It seems much more likely that we use the word "I" in many different ways, and McTaggart is certainly right in pointing out that we do not always use it as equivalent to "succession of bodily states" or even "succession of mental states." The mistake is to go on to suppose that we therefore use it for *some other* state or entity known in a peculiar way. But we may use some words differently from others without using them for *something* different. This is difficult to see because we are so used to the idea that words, especially those which function in sentences as nouns, adjectives, and verbs, must stand for or refer directly or indirectly to elements of facts in some fairly straightforward way. The only way to discover whether this always is so or not would be to examine the criteria which we do or would accept for the truth of the propositions in whose expression such words occur.

E.g. the simple behaviourist translation of "I have pain" or "I see red" into "My body has a pain," "My body is red-seeing" is unsatisfactory unless we know more about the use of "my body" in such translations. A certain combination of limbs, trunk, head, and organs constitutes the body of M. Macdonald. Must it follow that whenever e.g. I have a pain, a certain part of this physical combination is to be held responsible for it, still less that it can properly be said to "feel" the pain? It always makes sense to ask a person who has a pain where it is. The reply might be "In this leg" or "In this tooth," accompanied by pointing to part of his body. But it might be accompanied by pointing to the floor or the bedclothes if a man seemed to feel pain in a leg which had been amputated. We should reply, "You can't have a pain *there*; you must be mistaken," and should proceed perhaps to remove his pain by treating some other part of his body. But suppose whenever I complained of rheumatic pains and you asked where they were I always pointed to the arm of the chair, and when you massaged the chair I felt better.[1] Is this inconceivable, and if it happened would the chair be part of "my" body? In other words, isn't it only an empirical fact that when-

[1] I owe this example to Dr. Wittgenstein's lectures.

ever "I" have a pain it is cured by treating the body of M. Macdonald and not some other physical object? If you insist that any pain which I feel is caused by the action of this object on the nervous system of M. Macdonald I should reply that this too is an empirical fact, and like any other causal connection might be imagined otherwise than it is. So that "I have a pain," "I am seeing red," "I feel hungry," and similar propositions are not simply equivalent to "The body of M. Macdonald is in a certain state," although *in fact* it is usually the case that when one of the first sort of propositions is true the second is true also.

But, of course, "I" may be used in propositions which do refer simply to a part of this body. If I say "I have a scratch on my arm" I do call your attention to a part of my body. I could have conveyed the same information by saying "There is a scratch here," accompanied by pointing, without using "I" at all, though it is very usual to use the form with "I." But since this translation is easy it does not interest us philosophically.

McTaggart's point might be put in another way by saying that although in usages like "I am hungry," "I feel pain," I may be mistaken about my bodily states, I can never be mistaken about myself. You may convince me that a pain is not in my amputated leg, but you can never convince me that it is not I who feel the pain. "It is not my leg which causes the pain which I have" may be true, but "It is not I who have the pain which I have" is nonsense because it is self-contradictory. But if it is self-contradictory to say "It is not I who have this pain," it is tautologous, i.e. it conveys no information to say "It is I who have this pain," for who else could it be? To doubt this would be as if a Chairman who had asked "those in favour" of a motion to raise their hands, were to ask, "Are these people really in favour?" (where lying was not in question). This would be a meaningless question since by definition raising the hand was a sign of being in favour. Similarly, to *say* that I have pain is to *say* that it is "I" who have it and who assert that I have it, unless I am lying. But it does not follow that "I" is used sometimes to refer to a body and sometimes to something else, viz. a Self. To see this we need only consider the sense in which we ordinarily use such a phrase as "used for something else." We can say the word "bridge" is used for a structure over a river and for something else, viz., a game of cards; or the word "race" is used for a contest and for something else, viz. a group of people related in a certain way. In all such cases we can give verification-criteria for what the "something else" in question is. We can give sensible evidence of the existence of the different objects or states of affairs indicated. But what sensible evidence can be given of the existence of the two objects (or two aspects of one object if an "embodied

self" is preferred), the body of M. Macdonald and something else named by "I." Nevertheless, the word "I" is perfectly properly used in the examples given, just as the hand was rightly raised to support the Chairman's motion, but its function is not that of naming an entity inaccessible to sense perception or introspection, since we have given no meaning in English to the phrase "naming an entity unknown to sense perception or introspection." Of course McTaggart can adopt this phrase as the result of a rule for the translation of certain sentences containing the word "I," but it is not a rule already in use, and he has discovered no new facts which make its introduction necessary. In fact, this use of the word "I" seems much more like that of the gesture in response to "Who is in favour?", "Who has a pain?" than like the use of the words "this" and "that" to which it has sometimes been compared. We should be much less concerned to maintain that such a gesture referred to a unique constituent of any states of affairs, yet its function is perfectly understood.

Finally, there is the use of "I" which resembles that of words for physical objects. It is in a similar sense that I and this typewriter occupied the same places here yesterday. For the fact that I am the same person as I was yesterday certain criteria concerned with bodily similarity, behaviour, and memory would be accepted, and I might now doubt whether both I and the typewriter were the same as yesterday's objects.

The upshot is, that the only sense in which we *must* use words seems to be the sense in which we *must* kick the ball between the posts in order to secure a goal in football. We must use them in accordance with the rules of the game accepted by the other players or make an illicit move, i.e. talk nonsense. But the rules of the game are determined by human choice and convenience within the limits of empirical fact, and not by necessary, metaphysical connections between rubber balls and wooden posts. So, too, is our use of language, and there is no metaphysical problem of our knowledge of the self and our use of "I." We use "I" in empirical situations which can be investigated and to make propositions which can be communicated. We can also examine actual and possible uses of the word "I" and so far conduct a philosophical and *a priori* inquiry about the grammar of our language. But this will not, as McTaggart supposed, give us certain knowledge about the metaphysical nature of something called the Self, for it will not give us any information about the world at all, any more than the rules of the F.A. will tell us what the Arsenal players will in fact *do* on the field next year.

PHILOSOPHICAL SURVEY

PHILOSOPHY IN FRANCE

RECENT INTERPRETATION OF CARTESIANISM

THE Ninth International Congress of Philosophy is to be held in Paris next midsummer in commemoration of the third centenary of the publication of the *Discourse on Method*, and the recent publication of several important works on Cartesianism has raised in an impressive way issues which fall within the purview of the first of the six sections of that Congress, viz. that on 'The Present State of Cartesian Studies.' In particular, the studies of Laberthonnière, Serrus and Mouy[1] demand the attentive consideration of delegates participating in the work of that section.

Every philosophical doctrine, Laberthonnière conceives, aims at offering a meaning for human existence; consequently every such doctrine is ultimately "œuvre morale". The common view that it is primarily a body of interconnected propositions following from fundamental principles or axioms is importantly wrong, for the appearance of rigour lent by the logic inherent in a system is always subordinate to the intention or spirit which animates it. Therefore its truth can never be the truth of any abstract principle; indeed "sa vérité, c'est d'être viable." It is in this conviction that Laberthonnière strives, throughout the 800 pages of his *Etudes*, to lay under contribution all parts of Cartesian doctrine—methodology, metaphysics, psychology, ethics and theodicy—with the one object of determining the full sense and import of Descartes's answer to the problem of human destiny. And to this end his course is set by the reflection that though there are several principles or attitudes *de vie morale* which characterize and differentiate philosophies most profoundly they are ultimately reducible to two, according as the animating conviction is "vivre pour le temps" or "vivre pour l'éternité." That Descartes elected the former alternative is not open to doubt, and it is this temper of mind that explains the attitude adopted towards his problems and that predetermines the direction and significance of his detailed doctrine. For that temper of mind, Laberthonnière thinks, was not primarily intellectualist but essentially practical—utilitarian and reformative. An interpretation of Cartesianism dominated by this belief strikes one perhaps as unpromising, but it is carried through so vigorously that its suggestiveness and originality cannot be denied. Descartes's declarations about the unity of all knowledge, the very generality he claimed for the applicability of his method, the formalistic character of his metaphysics and psychology, taken in conjunction with his view of the solidarity of metaphysics and science, seem hardly to lend plausibility to a 'non-intellectualist' interpretation. But Laberthonnière is little impressed by these things. Whether they express

[1] *Œuvres de Laberthonnière*, publiées par les soins de Louis Canet. *Etudes sur Descartes*. Paris: Vrin. 2 vols. Pp. 467, 379. 1935. 70 fr. C. SERRUS, *La Méthode de Descartes et son Application à la Métaphysique*. Paris: Alcan. Pp. 125. 1933. 12 fr. P. MOUY, *Le Développement de la Physique cartésienne:* 1646–1712. Ouvrage couronné par l'Académie des Sciences morales et politiques. Paris: Vrin. 1934. Pp. 340. 40 fr. DESCARTES, *Lettres sur la Morale*, Correspondance avec la Princesse Elisabeth, Chanut et la Reine Christine. Texte présenté, revu et annoté par Jacques Chevalier. Paris: Boivin. 1935. Pp. xxvi, 332. 30 fr.

his intention or not, the real character of his occupation cannot be argued from them. He is not "le speculatif qui s'isole," nor "un esprit pur" which, conceiving philosophy as a happy hunting ground for the exploitation of a scientific method, would find the attainment of knowledge its own proper and satisfying end. On the contrary, what Laberthonnière thinks gave the method its value in Descartes's eyes, and what inspired his particular researches, is the conviction that knowledge is the principle and the means "pour *faire* et pour *agir*,"—his whole philosophy "est suspendue à l'idée de découvrir les fins, les conditions et les règles de l'action humaine." The end of his science is not, as with the Greeks, the contemplation of its object but the possession and utilization of that object for the amelioration and development of human life. From which it follows that Descartes envisaged the existence of evil as proposing not a theoretical but a practical problem, and one which the advance of science would dissipate. Human ills are temporary and not inherent defects of the human compound, and their elimination is an essential part of Descartes's "dream of conquest by science." It is in the human compound of mind and matter, and in the natural world, both conceived in a positivistic sense and without any non-natural intermediary to modify or improve them, that he first proclaims the possibility of bringing about a terrestrial perfection and salvation.

With this view of the nature of the task Descartes set before himself, Laberthonnière attempts to show how it determined not only the broader conclusions of his philosophy but also distinct doctrines which superficially appear to be quite unconnected with such an ethical intention.

On the one hand, the *séparatisme* of God and man inherent in Descartes's new secular view of human destiny and duty by which man is left to fashion for himself without divine assistance a future in which God has no part, on the other hand, the double dualism of the conscious self and God and of the self and Nature—both issue directly from the primary affirmation of the Cogito. From the manner of its introduction the Cartesian doubt is easily seen to imply of itself from the outset the very separation which is eventually reached. For "to begin deliberately with an act of doubt is to admit that we must first of all place ourselves exclusively at the standpoint of the subject." In this initial position alone both the *séparatisme* and the dualism are virtually contained; the Cartesian metaphysic merely shows *in extenso* that it *is* so contained, by introducing no further and independent substances except by intermediary ideas that are modes of the only substance whose existence is ever directly known. Thus dualism is not Descartes's last word: within it there is that *séparatisme* which does not preclude but allows for a relationship of the self with Nature and with God, though that relation is but an external one. The situation of man in the world as Laberthonnière neatly puts it, is that "he is aware of God behind him, conditioning all, sustaining all, but he no longer sees God before him." Man has a natural destiny into the fulfilment of which God does not enter: it is precisely for this reason that human action is free.

Only a few of the consequences following can be summarily indicated here:—Descartes, in championing the cause of a secular science, offers no apologia for the sovereignty of theology but is content to affirm its compatibility and is only concerned to defend his physics. Knowledge of God is used wholly in the interests of science, at no point is science used in the interests of a knowledge of God. Further, the character of his method is intelligible only when interpreted by his ultimate aim. The conception of a mathematical physics is his final end and first concern. For although Descartes regards all science as being of the *composé* (a compound of simpler elements in certain relation-

ships) by analogy with mathematics, he none the less conceives mathematics by analogy with mathematical physics. For this type of physics is *presupposed* in his doctrine of analysis. Again, in his metaphysics, the *séparatisme* determines his attitude to theology and his neutrality concerning divine purpose, and this in turn explains the hypothetical character of his conclusions on personal immortality. His metaphysics is thus constructed for the sake of his physics, which is to say, for Laberthonnière, for the sake of man's successful intervention and control of Nature and in his own temporal interests; the metaphysics is not constructed to justify or explain religion or theology, and it fails to lead man to a blessedness that is eternal. "The religion of which God is thus the object resembles the religion of primitive man: heaven with its potentialities are envisaged as a means for life on earth, not life on earth envisaged as a means to heaven." Lastly, the alternative of "vivre pour le temps" which Descartes had elected explains his inability to replace the "morale provisoire" by a tenable "morale définitive." The latter remains a desideratum which he later recognizes to be unattainable because of the impossibility of reducing everything to distinct ideas. Henceforth his dream of sovereignty by means of science yields to a recognition of man's ultimate subjection. Here Laberthonnière sees a further consequence of Descartes's failure—a spiritual failure—and not merely an intellectual one, or better, a failure that is intellectual *because* it is spiritual.

Whatever judgment on Laberthonnière's evaluation the reader may finally form with the accumulated evidence and argumentation of these volumes before him—whether he decide that on account of Descartes's express utterances about his proper aim and occupation, or despite these, Laberthonnière's thesis is a timely correction of the usual 'intellectualist' interpretation, or that it is not at all events much in the question of the validity and connection of Descartes's method and his natural science seems capable of examination in a 'neutral' manner, without raising the issue of their ultimate orientation. So much indeed Laberthonnière himself would seem to allow in proposing the very unusual view that the method issues from the physics, and not the physics from the method. By this I take him to mean that unless Descartes had already seen the physical world as completely geometrical and mechanistic he would have propounded no method at all or else one of a very different character from the method he had propounded. But so soon as we recall that in the best and fullest statement of his method (the *Regulae*) Descartes has as much to say about the 'ontal' presuppositions of his method as he has about the process or procedure itself, what at first sight seemed startling and suggestive in Laberthonnière's declaration is seen to amount to little. My own view is, briefly, that there is no logical precedence but co-implication between them. The 'brain-wave' on the 'memorable night at Ulm' was an intuition whose content virtually contained *both*—method and mechanism—indissolubly united, though their distinction was not then perceived. Descartes's effort in succeeding years to clarify and explicate the detail of that intuition is effected by his showing at one time how the formal character of the physical world exacts, in order to become known, the employment of certain cognitive powers in certain ways and in a certain order; and in showing at another time how (by using those powers in that order) clear and exact knowledge has been attained of a Nature which, *tout nue*, is only spatial in character and mechanical in operation. All this, it seems to me, Descartes first supposed and later thought he had confirmed. To estimate the worth of his intuition is possible only by examining critically its 'rationalization' into those Cartesian theories we call methodological and mechanistic. And the former purports to be applicable not only to physical existents but to existents of any kind.

To institute such an examination is the purpose of M. Serrus's admirable work, conducted in the very 'modern' manner familiar to those who have read his larger work on logico-grammatical parallelism. It is by this parallelism that we constantly tend to think reality in terms of subjects having attributes. M. Serrus would not subscribe to Laberthonnière's inversion (cf. last paragraph), but decides that the *Regulae* expounds what is incontestably "the method of mathematics." It is applicable to whatever exhibits quantity and order, but to have extended its use to metaphysics is Descartes's great error. For Descartes claimed that although the *Dioptric*, the *Meteors*, etc., were fair samples of the fecundity of his method, it was no less to be seen at work in the *Meditations*. But in these Descartes proceeded *à la scolastique*, syllogizing from self-evident propositions and indemonstrable principles—so much being apparent from the *order* in which the problems are treated and from his constant use of characterizing propositions, with which alone the syllogism can proceed. And it is here that M. Serrus sees but the baneful influence of a dead past. So what is genuine methodology in Descartes must be cut away from what is merely scholastic survival; it is to the former "that we owe our intellectual liberation . . . and modern logic." The profound meaning of his revolution in science is that he first conceived "a mathematics liberated *au maximum* from sense imagination and founded in a limited number of principles, from which all the rest is logically deducible." For M. Serrus the genuine and original part is the doctrine of analysis and synthesis, in Descartes's sense of the words. Both are "non-aristotelian." This science of order, which resumes his *pura Mathesis*, "represents, with the theory of groups, what quite incontestably is really logical in modern mathematics." But Descartes unfortunately retained much of the dead-wood of Scholasticism, and so got 'caught' between two irreconcilable notions of judgment. The one, based directly on relations, had not then been separated out, the other was the traditional view "from which our own time is far from being liberated." Now M. Serrus maintains very plausibly that, whatever Descartes himself may have supposed the method 'proper' (i.e. the rules of analysis and synthesis) has valid application only to relational propositions. The 'dead' part of the method incorporates all that involves resort to indemonstrable principles certified by their self-evidence and (later) justified by God's existence. And it is this 'dead' part which has to represent the method in his metaphysics. M. Serrus's contention might be summarized thus: When it is asked whether Descartes did or did not apply his method in metaphysics, the question is ambiguous. He *did* apply it in so far as he utilized what is really scholastic in it, but it is precisely that which is not properly *his* method. He *did not* apply it, in so far as he failed to use what is really original, profound and of lasting influence in it, for this part of it is *impossible* of application in metaphysics. It is impossible because the kind of conclusions sought in the metaphysics are either propositions asserting existence (both 'necessary' and 'possible') or those asserting attributes of subjects:—all of them other than relational propositions. But the very success of his method in the mathematical and natural sciences is due to these being hypothetico-deductive systems in which logical coherence alone is concerned. For they contain no assertions of existence, contingent or necessary, nor introduce attributive propositions. They raise no question of a criterion of truth and are indifferent to the truth of their axioms, and to that of their principles. The principles of Cartesian metaphysics, on the other hand, are general propositions "which can be utilized only in the syllogism," and this is "un raisonnement infécond." So, M. Serrus sums up, Descartes had devoted himself to "the impossible task of constructing deductively a metaphysics based on the relations which the verb 'to be' introduces into the

proposition, and the verb 'to be' even taken in different senses." Thus he did not effect what he supposed he had effected—the mathematization of metaphysics. Descartes, *malgré lui*, was the destructor of the very theses he thought to establish. The Kantian element in Cartesianism, M. Serrus suggests, was "trop nouveau," and failed to 'grip' contemporaries. The 'Ontological Proof' stood for the past, the Cogito represented the future. The failure of Descartes has shown us according to M. Serrus, that "though strictly speaking metaphysics has its logic, it is not the logic of science," and he believes "with Kant that metaphysics cannot claim to be a science."

Passing from Descartes's theory of science to his particular researches in physics, M. Paul Mouy has produced what is likely to prove for a long while the standard work on Descartes's influence on professional physicists in the half-century following his death. M. Mouy draws into distinct focus the whole tableau of the diffusion of Cartesianism in France, in which we discern the actual character of Descartes's influence (quite other than he anticipated or desired). In an Introduction of seventy pages he explains the significance of the physical results reached by Descartes himself, passes to the *Treatise* of Regius (the first work in Cartesian science not composed by Descartes), thence traces the sinuous but continuous current of Cartesian physics, physiology and anatomy, always sensitive to what is distinctive in the contributions of such figures as Cordemoy and De la Forge and Rohault. With them we witness the rise of a new school intent on extending and correcting the detail of their founder's work. But these natural philosophers were not, excepting Rohault, experimenters, and Rohault died too young to prove his capacity. Neither Paris nor Holland could produce an experimenter, yet the very kind of reception Descartes had anticipated and wished for his physical work was that it should be submitted to that experimental testing which he had lacked time and money to undertake sufficiently himself. "We find many professors and compilers but no men of science." The modifications eventually introduced into Cartesian physics arise precisely from a more experimental treatment of such topics as the law of impact. M. Mouy regards the prevailing supposition that Cartesian science was finally overthrown in the early years of the eighteenth century an excessive one. Malebranche absorbed what was still living in it and "built upon thoroughly Cartesian bases a magnificent scientific edifice which only the modesty of its constructor prevented from appearing in its real significance and brilliancy." A decline sets in with Leibniz's attack on the law of the conservation of motion and with Newton's refutation of the hypothesis of vortices. What remained—and for M. Mouy still remains—constant and dominant is the original Cartesian thesis that Physics is nothing but Geometry.

S. V. Keeling.

PHILOSOPHY IN GERMANY

In *The Theory of Mobile and Static Ideas*,[1] Waldemar Mitscherlich (Professor of Political Science at Halle) puts forward some general views about knowledge and then applies them to economic theory. He maintains that science includes both "static" and "mobile" ideas. On the one hand we have ideas which remain the same, or at least only change through increasing knowledge. These are mostly ideas of natural objects. The natural

[1] *Die Lehre von den beweglichen und Starren Begriffen.* Verlag W. Kohlhammer. Stuttgart, Berlin, 1936. Pp xv + 451.

world appears to be unchanging—gold and electricity, birth and death, summer and winter, etc., are to-day what they were thousands of years ago. An idea which applies to such objects at any one time applies at any time; it has universal validity. But, on the other hand, some of our ideas apply to objects at one time and not at another. These are mostly ideas of objects constructed by men. Such objects are continually changing. At every period we find different religions, different works of art, different societies, and so on. And these changing objects can only be represented by changing ideas. But it would be misleading, Mitscherlich continues, to leave the matter at this point, for no object is really permanent. The difference in our ideas is partly due to different rates of change among objects, and partly to difference in our attitude. For we are interested in the permanent aspects of nature, but in the changing aspects of art, religion, and other objects created by man.

After this introduction Mitscherlich turns to economic theory, and maintains that it consists for the most part of mobile ideas. Every epoch has its distinctive theory, distinctive because determined by the needs of the epoch and the economic structure which they shape. We can look at economic questions from two points of view. We can take a cross section and generalize about a given period, or we can consider a succession of periods. Even the first type of inquiry involves changing ideas, mainly because the principle which we use to select our period depends on contemporary interests. But the importance of changing ideas comes out most forcibly when we consider a succession of periods. We then see how economic theories arise out of economic systems, and Mitscherlich devotes the rest of his book to supporting this view.

The main general points about this dependence are as follows: The economic structure of a period is the product of unconscious forces. The theory brings these forces into consciousness, and in this way itself influences the course of events to a certain extent. But as time passes different needs arise and the structure gradually alters. When this alteration has reached a certain point the theory is seen to be inapplicable, and a more adequate one takes its place. Mitscherlich strongly repudiates the view that the change from one system to another is a matter of development. It is simply change, for each system is new. And, accordingly, the differences in theory are not due to increasing insight into economic conditions, as many people suppose. It is simply a question of change. One theory differs from another because it applies to different objects.

Mitscherlich supports this view by an historical survey which extends from medieval times to the present day. He wants to avoid dividing the periods by a principle which only has contemporary validity. For this purpose he takes the theories themselves as his starting-point, and then surveys the situation in which they arose. Thus, for example, he considers the mercantile theory. It arose after the close of the Middle Ages in a period where the main aim was to achieve State unity. The mercantile period was an age of authority in which the individual is simply member of a State. Three important developments took place which formed the main supports of State unity and State control—centralized government by officials, a standing army, and the unification of economic life. Thus the central point for economic theory was the question, what does an economic system require to be united with the State? And this determines the theory in all its details. For example, during this period money is established as a medium of exchange and is used to strengthen the State. It is considered very important to possess money as distinct from goods, and accordingly the mercantile theory advocates a balance of exports over imports.

But in the eighteenth and nineteenth centuries we find quite a different theory and quite a different situation. The individual is struggling to free himself from social restraints, and the needs of the time explain why this struggle occurs. It is a period of rapid development. Scientific discoveries revolutionize industrial life. The State fails to keep pace with this development, and its restrictions stand in the way of industrial prosperity. The situation demands free scope for individual activity, and industry for the first time becomes an end in itself. Scientific discoveries also have a profound effect on general beliefs, and the need for a change of outlook also explains the importance attached to the individual. The economic theory arises very naturally out of this situation. It maintains that self-interest is the mainspring of action, and that individual activity should not be checked. There is no discord between the interests of the individual and of the community. If each person pursues his own good general harmony will result, whereas any interference will lead to disaster. All particular laws, the theory of free competition, of supply and demand, etc., rest on these assumptions.

After this historical survey Mitscherlich applies his thesis to the present day. Only here, as he says, there are special difficulties, for the object is still changing and the theory has not yet crystallized. We know, however, that the idea of the community is central. But we find this idea both in a radical and moderate form, that is to say, in communism on the one hand, in national socialism on the other. In its radical form it lays too much stress on mechanism and rationality—which is unhistoric. And here Mitscherlich dismisses it, for he only wants to discuss the moderate form. In this we find appreciation of mystical and irrational factors, an idea which Mitscherlich commends (but is it static or mobile?). Thus the present period has certain affinities with the medieval and mercantile periods. But, on the other hand, the modern State is far more conscious of itself, the feeling of national individuality and national solidarity is very strong.

The author then points to concrete ways in which the community idea expresses itself, in unions, cartels, co-operative stores, etc., and he gives an interesting survey of industrial conditions from this point of view. And he points out how the same idea is found in economic ethics, that there is, for example, a great feeling of mutual responsibility between the State and its members, and a feeling that each individual should work for the good of all. We get these ethical views embodied in unions, pensions, care of infants, etc. Economic egoism is no longer wanted, and has died. It is thus inevitable that the economic theory of individualism should be inadequate. Mitscherlich concludes by discussing a number of economic questions, and in particular the theory of the returns from land, labour, and capital.

Otto Neurath has a pamphlet in the series *Einheitswissenschaft*, which asks, What do we understand by rational economic inquiry?[1] One of his main objects is to introduce a precise terminology. He points out that in economic disputes one often does not know whether two people are speaking about different matters or contradicting each other about the same. And the use of mathematical calculations does not help if premises and concepts are confused.

He introduces a number of terms, among them *Lebensstimmung* and *Lebenslage*. The *Lebenslage* of an individual is made up of such factors as the number of rooms in which he lives, the number of hours he works, the amount of food he eats, and so on. If he is well fed, healthy, and happy his *Lebensstimmung* is "lively"; if he is badly fed and ill it is "depressed." We can arrange *Lebensstimmungen* on a scale of higher and lower, and this gives us a

[1] *Was bedeutet rationale Wirtschaftsbetrachtung?* Verlag Gerold & Co. Wien, 1935 Pp. 46.

scale for *Lebenslagen*. One *Lebenslage* is higher than another if it produces a higher *Lebensstimmung*.

The height of a *Lebenslage* clearly depends in part on the way activity is organized. Suppose a countryman surrounded by fields, marshes, cattle, etc. He may drain the marshes before he tills the fields, or vice versa. Whether he does the one or the other will profoundly affect the height of his *Lebensstimmung*, and so of his *Lebenslage*. The aim of rational economic inquiry, and this is one of Neurath's main points, is to discover the influence of specific schemes and measures on the welfare of a society, and more precisely on the *Lebenslagen* of its members. This will of course involve the classification of *Lebenslagen* into types, for we cannot consider each individual separately.

His other main point is that we cannot represent a *Lebenslage* by means of one element alone, and in particular that we cannot represent it by means of money. The concepts of costs, profit, and loss are only valid for commercial reckoning. In order to tell whether one *Lebenslage* is higher than another we must reckon with a number of specific factors. People tend to think that this is unscientific, but we find it in highly rationalized undertakings. The captain of a battleship who sets out to win a battle considers a large number of different factors—the direction of the journey, the speed of the boat, the range of the guns, and so on. He has no formula for expressing one of them in terms of another. And similarly when we want to discover how a specific scheme will affect society we have to consider a number of different factors—such as hours of work, living conditions, opportunities for recreation, and so on.

An interesting little book by EDGAR WIND[1] has been reprinted from the "Lectures of the Warburg Library." The author wants to show that the philosophic and artistic differences of the eighteenth century were two phases of one conflict, or, as one might put it, express the same conflict in different ways. It is a conflict between two ideals, the sceptical and the heroic.

Wind gives an account of Hume's ethical outlook. He points out that Hume values the natural and condemns the excessive, whether the excess be in pride or humility. Excess of either kind (enthusiasm or superstition) is artificial, and can only be maintained at great effort. The ideal does not lie in heroism but in humanity and tolerance. Natural inclination to good is worth far more than principle. On the other hand, we have the ideals of Johnson and Beattie, in which heroism, effort, and action on principle play the main part.

Wind then considers literary controversies. Hume believed that art requires greater refinement than we find in ordinary speech. But to be affected is far worse than to be unduly natural. Burke, on the other side, finds greater interest in the sublime than in the beautiful, in the overwhelming and supernatural as against the harmonious and agreeable. There was a great deal of controversy about figures of speech. Since metaphor and hyperbole excite strong feelings, they were condemned by one side and praised by the other. There was a corresponding controversy in the field of painting, where the "historical" or "allegorical" portrait was alternately praised or condemned. Wind refers to Goldsmith's essays on metaphor and hyperbole and to his caricature of the historical portrait in the *Vicar of Wakefield*.

It is significant that Reynolds preferred the historical portrait, whereas we can find none in the works of Gainsborough.

After noting this point Wind elaborates his thesis that the works of these two painters express the conflict between the heroic and sceptical ideals. Reynolds is an advocate of the grand style. An artist who paints in this style

[1] *Humanitätsidee und heroisiertes Porträt in der Englischen Kultur des* 18 *Jahrhunderts.*

must represent heroic subjects. He must also aim at a "general idea" or type, avoiding details which suggest particular persons. Reynolds strongly advises artists to copy old masters, and recommends the practice of "quoting" from their works, a practice which he follows himself. And he believes that artists should be men of general culture well versed in literature. In all these respects Gainsborough is a complete contrast. He paints in a simple and natural style; he finds his inspiration in the streets and fields; he looks on painting as a craft, and contrasts the artist sharply with the gentleman. Reynolds complains that he is lacking in poetic invention.

After making these general points Wind compares the portraits of these painters in great detail. His main point is to show that Reynolds always tries to ennoble and dramatize his subjects, while Gainsborough presents them in some natural attitude. For example, Reynolds paints Master Coke as the infant Hannibal, looking prophetically into the future. He paints Mrs. Siddons as the Tragic Muse, seated on a throne between Pity and Terror. The composition is strongly reminiscent of Michael Angelo. And he paints Lord Heathfield as the defender of Gibraltar. His figure stands out sharply against a background darkened by powder, the key of the fortress is in his hand, and cannons appear in the background. On the other hand, Gainsborough in the portrait of his daughters keep the scene as natural as possible, two girls in ordinary dress are chasing a butterfly. The scene is lyrical. There is nothing sublime in his portrait of Mrs. Siddons, which is just the portrait of an elegant woman. And he paints Dr. Schomberg holding a walking-stick and hat. There is nothing whatever to suggest his profession, and the figure does not so much stand out against the landscape background as form part of it.

Wind considers a large number of portraits, and his comparisons are more detailed than these examples suggest. In giving interpretations he frequently touches on the ideas and practices of the period. There are ninety illustrations at the end of the book, so we can follow his descriptions quite easily.

HELEN KNIGHT.

NEW BOOKS

The Purpose of God. By W. R. Matthews, K.C.V.O., D.Lit., D.D., Dean of St. Paul's, Fellow of King's College, London. (London: Nisbet & Co. 1935. Pp. xi + 182. Price 7s. 6d. net.)

In this book, which contains the substance of a course of lectures delivered last year in the University of Glasgow, the new Dean of St. Paul's (and students of philosophy may congratulate themselves that in this high office "philosopher philosopher succeeds") discusses the famous Argument from Design, which has played so large a part in the history of philosophical theology, "not only historically, but also with reference to the implications of modern science." While traversing ground which perhaps has been too often surveyed to afford much opportunity for striking originality, it is remarkably free from tedious repetition of familiar facts and arguments and is an excellent example of the independent thought, sound judgment, and clear exposition which we expect to find in any work by Dr. Matthews.

The first chapter, although its title is "The Argument from Design in the Philosophy of Theism," is in fact chiefly devoted to the other two traditional arguments for the existence of God, the Ontological and the Cosmological. The principle of the Ontological Argument is restated in the form: "If there is any truth, there is absolute truth, and if there is absolute truth there is absolute Reality" (p. 24); and its defect as an argument for the existence of the God of religion is indicated by the remark that while "the possibility of truth does depend on there being an Absolute Reality," "the possibility of making value judgments does not depend upon the real existence of an Absolute Good" (p. 26).

The second chapter (admirably lucid and sensible), on the "classical formulations" of the Design Argument, is followed by one on "general objections" to that Argument. Among these the criticisms of Hume are first considered. It is ingeniously argued that the view of the world, propounded by Philo in the *Dialogues on Natural Religion*, as constituted by a finite number of particles undergoing perpetual rearrangement in an eternal duration, is not really compatible with asserting the actual order which we find existing to be the result of chance, since, unless the "particles" be determinate in their properties, they are not numerable units at all, and if they are determinate, there is already a real order antecedent to the fortuitous distribution of them throughout an infinite time which Hume suggests would inevitably produce (and that an infinite number of times) the particular order which we observe.

Having dealt with the hypothesis that the world-order is due to chance, Dr. Matthews turns to the "immanent teleology" (including along with this "emergent evolution"—a phrase of which he justly says that it is "a good description, but no explanation") acknowledged by many thinkers who reject theism, and contends that it demands a "transcendental theology" to make sense of it. The Teleological Argument thus having been shown capable of surviving the chief objections brought against it, our author goes on in Chapter IV to reconsider it. He observes that, with the new perspectives opened to us by the progress of natural science, "our home has become so large that we can no longer be comfortable in it" (p. 98). Already, in the nineteenth century, we were aware of the overwhelming vastness of the

material universe; we are now called upon to doubt its stability and even (with the religious teachers of an older day) its permanence. "That 'the world passeth away' seems to be an assured result of modern knowledge. . . . The impression grows upon us that we are in a world which is alien to our values, indifferent to our hopes, and, if purposive at all, is directed towards ends for which we are irrelevant. In short, it is not easy to believe in the relevance of man" (p. 99). But, after all, "whatever else the universe may be, however mysterious in its complexity, . . . its most astonishing and significant character is that it contains minds which begin to understand it, to form estimates of it, and . . . are advancing in their knowledge of it" (p. 102). Dr. Matthews goes on to show, following here Professor Stout, that "the progress of scientific knowledge, and indeed all human activity of a rational kind presupposes as a condition the existence of a teleological order, . . . 'not only that there are general laws, but that these laws are discoverable with increasing adequacy, precision, and certainty.' But this would be impossible unless 'the course and constitution of nature were pre-adapted to our intelligence'" (p. 108). Yet "it might turn out that, as Hume thought, there was a good case for the existence of Creative Mind, but no case for supposing that this Mind was worthy of our trust or reverence, except perhaps in the sense of its infinite resourcefulness" (p. 112). But further consideration does not encourage the suggestion that our judgments of truth are not only distinguishable but wholly separate from our judgments of value. On the contrary, "the more adequately a mind approximates to an ideal of the pure intellect, so much the more completely is it directed towards truth as an absolute value and a dominant interest" (p. 114), and "mind, when most completely mind" seems to "recognize that there are values which possess absolute authority" (p. 115). As Sorley has said, To truth, beauty, and goodness "as well as to nature the mind of man is adapted; and this adaptation can neither be explained nor explained away by biological laws" (p. 118), and, though no doubt "few would be content to believe that truth is "unattainable," while "many believe that they can easily dispense with the conception of absolute value" (p. 115), yet "we do not find that most of those who dwell upon the relativity of all moral judgments deny in practice that there is some standard of conduct which has an absolute claim upon them," "some things which they would die rather than do or consent to" (p. 119).

Teleology thus defended, Dr. Matthews passes in Chapter V to consider more in detail how "a teleological universe" may be conceived. "There is no need," he says, "to identify the teleological view of the world with an absolute predestination. For we may suppose that the end which is being realized in the world process includes the development of freedom." (p. 128). Indeed, "the very fact that we cannot triumphantly demonstrate the teleological order of the whole is a consideration in favour of the religious view of the world" (p. 130). For "the sense of sin is inseparably bound up with a teleological view of the world . . . it presupposes a cosmic purpose, and if we take it to be well founded and not illusion, it is the revelation in personal life of the existence of that purpose . . . no religious philosophy can have the aim of showing that the whole course of events and the whole system of the universe, including men and their actions, are teleologically ordered. In all the higher religions the promise of redemption from the world is more fundamental than the faith that the world is providentially ordered" (p. 143). "It may seem difficult to reconcile the belief that the world is the sphere in which divine purpose is realized with the assertion that we need to be saved from the world. But the apparent contradiction vanishes when we

realize that a part of the divine purpose is the creation of man and that . . . man, as he stands, is incomplete, an unfinished creation. To reach his true being and to become what, in the cosmic purpose, he is to be, he must be taken up into the new life which has appeared in Christ" (p. 143). "To the failure of response to creation must be attributed many of the waverings and vicissitudes of the course of history." But nevertheless "history has some meaning. It discloses a direction. There is something significant going on—the progressive creation of man" (p. 152).

The concluding chapter has the same title as the whole book—"The Purpose of God." It opens with an able criticism of Prof. Nicolai Hartmann's account of the antinomies which he affirms to exist between religion and ethics. The keynote of Dr. Matthews's own theory is contained in his remark that "in the loftiest reaches of development . . . the purpose of God finds fulfilment not by completion but by persuasion" (p. 157). From this point of view history can be allowed an importance which in a philosophy such as (for example) Bosanquet's cannot concede to it; and, in Dr. Matthews's opinion, "if we attach any ultimate significance to history we shall have to choose between some form of the doctrine of recurrence and some form of eschatology" (p. 164). But "eschatology does not . . . represent the Kingdom which is the meaning of history as an historical event; what is historical is the vanishing of the present order to give place to the revelation of the Kingdom" (p. 165).

It is obvious that for a thinker who regards history in this way theocracy must be the goal of our political aspirations, although hitherto attempts at it "have been built upon a false conception of the nature of the rule of God" (p. 168). "The doctrine of God's self-sufficiency" must "be rejected" (p. 173); and we must take seriously the declaration of a New Testament writer that "we love Him because He first loved us" (p. 174). (It is perhaps worthy of note that, although the lectures reproduced in *The Purpose of God* were delivered on a foundation designed for the defence of Christianity, no reference is made here, where it might have been expected, to the Christian doctrine of the triune nature of God.) But, while the Kingdom of God, conceived as a fellowship of persons, is "a flowering of the purposive life which is in the world," it does not afford "a completely adequate idea for the explanation of the teleological movement of created things" (p. 175). "The universe is not only the 'vale of soul-making,' it is not only the home of man . . . the training ground for his home beyond . . . it is all these things, but it is much more, . . . the work of a sublime Artist who expresses Himself in its majesty and its beauty, and its sublimity is part of its justification" (p. 177).

Dr. Matthews is aware that he may be charged of having given too little attention to the problem of evil (p. vii); and he promises us in the future a separate work from his pen upon this difficult subject. He has not, however, failed to indicate in the book before us the kind of lines upon which his discussion may be expected to proceed.

Why, by the way, does Dr. Matthews think (p. 47) that Cicero was mistaken in attributing to Aristotle the famous statement of the Argument from Design translated by him *De Natura Deorum*, ii, 37? Although it is true that Valentin Rose included it in his *Aristotle's Pseudepigraphus*, holding as he did that all the more "Platonic" passages that have come down to us as Aristotle's (and even *Metaph. A* among them) were falsely ascribed to him, few Aristotelian scholars would now hesitate to regard the dialogue *On Philosophy*, from which the quotation in Cicero is taken, as really his.

C. C. J. Webb.

Opera hactenus inedita Rogeri Baconi. Fasc. XIII. *Questiones* supra libros octo Physicorum Aristotelis nunc primum edidit Ferdinand M. Delorme, O.F.M. collaborante Robert Steele. (Oxonii: 1935. Pp. xxxix + 439. Price 30s.)

This, the thirteenth *fasciculus* of the edition of Roger Bacon's works now in course of publication by the Clarendon Press, is the seventh and last of those containing the academic teaching given at Paris by the *Doctor mirabilis* in the middle of the thirteenth century and preserved to us in the Amiens MS. 406. The indefatigable transcriber of what is understood to be a text singularly difficult to decipher, Mr. Robert Steele, has prefixed a Latin dedication to the British Academy, under whose auspices and with whose financial support the great undertaking of which it forms part has been carried on. In the French introduction which follows, P. Delorme discusses the order of these Paris courses; this on the *Physics*—there is another on the same works already published—he holds to be the seventh in chronological order of twelve on treatises passing under the name of Aristotle, whereof eight are included in the Amiens MS. and have now appeared in the Oxford edition, while two referred to in these, as extant or as promised, are missing—unless indeed that on the *De Generatione et Corruptione* is to be identified, as P. Delorme suspects, with an anonymous work found in a MS. belonging to the College of St. Isidore at Rome and attributed by the Quaracchi editors of St. Bonaventura to Walter Burley.

P. Delorme notes that the chief authorities, beside Aristotle, followed by Bacon in this course are Avicenna, Averroes, and Boethius: that his language is not (as too often elsewhere) aggressive and violent, and that on Averroes alone does he animadvert with severity; and that (in the editor's opinion) he does not direct his criticisms against contemporaries, so that these *quaestiones* lend no support to P. Mandonnet's theory of a bitter personal antagonism between him and St. Albert the Great. On the celebrated question of the eternity of the world it is observed that Bacon believes Averroes to have been wrong in ascribing to Aristotle the affirmative view; but in a discussion intended to show, against Mandonnet, that he was by no means singular in this view, but in agreement with Albert and others, I am not sure that P. Delorme has sufficiently distinguished between the assertion that Aristotle did not himself hold the world to be eternal and the assertion that the Philosopher's arguments in support of its eternity prove only, as a matter of fact, that it is not the product of natural generation or subject to natural corruption.

To be properly qualified as a reviewer of this book one should be more familiar with the text and subject matter of Aristotle's *Physics* and with the medieval commentaries thereon than the present writer can pretend to be. But I should like to associate myself generally with the remarks of Professor A. E. Taylor in his notice of Fasciculus XII in *Mind* (July 1935) on the method adopted in this edition; and to add to them the observation that the omission of references to the pages of Bekker's edition of Aristotle's Greek text—the presence whereof would greatly conduce to the convenience of students—is symptomatic of a failure, characteristic of the editors, to apply their minds to questions which involve going behind the Latin versions of the Philosopher; a failure which falls to be reckoned among the features of the Oxford Roger Bacon suggestive of an unfavourable contrast with the masterly edition of Eckhart's Latin works now appearing under the editorship of P. Théry and Dr. Klibansky, a *fasciculus* of which is reviewed elsewhere in this number of *Philosophy*.

This same feature may be illustrated in an instance which is perhaps worth

noticing here. On p. xxxviii of his Introduction, P. Delorme quotes the following words from p. 300 of the following text: *mathematica non habent positionem nec locum nisi secundum intellectum et opinionem secundum aliam translationem, et dicit in fine quarti Physicorum.* He then tells us that "after long reflection" he has come to the surprising conclusion that *secundum aliam translationem* here means, not (as one would expect) "according to another translation" from the Greek, but *secundum motum imaginarium.* It is perhaps because P. Delorme has not observed that Bacon has made a slip in saying *in fine quarti Physicorum,* and that the reference is to the first chapter of *Phys.* iv (208 b. 23–25), that he has resorted to this strange hypothesis. For in the Junta edition of Averroes' Commentary the words are rendered, according to William of Moerbeke's version, *ut solum intelligatur ipsorum positio,* but according to the Latin translation from the Arabic, *sed situs eorum est opinabilis tantum.* P. Delorme himself remarks that Bacon must have known this latter translation, and surely this difference of rendering sufficiently explains *secundum aliam translationem* without resort to so desperate an expedient as he has thought it necessary to suggest. But the interest of this passage does not end here. For, as may be learned from the Provost of Oriel's note in his recent edition of the *Physics* (p. 564.), the Greek text in this place exhibits a remarkable variation. Most MSS. read *ὥστε μόνον αὐτῶν νοεῖσθαι τὴν θέσιν,* while Simplicius, who mentions this reading as an emendation of Alexander's, has *τὰ μόνον λεγόμενα διὰ θεσιν,* to which modern editors have returned. It certainly looks as if the former of these two readings lay behind the Latin of William of Moerbeke, the latter behind that of the Arabic on which the other Latin version was based.

I add some suggested emendations which have occurred to me in the course of my reading. P. 29. 35 *quod. Ad* l. *Quod ad.* 30. 29 dele [*particularis*]: 34. 29, 30 *b. distancia illa* [*que*] *est prima*: 35. 35 *natura substantialis precedens* l. *nature* (*naturae*) *substantialis precedentis*: 47. 8 *signetur* l. *signet*: 61. 11 *privatio potest esse forme*: *hujus* l. *privatio forme potest esse hujus*: 62 l. 1 *utra* l. *utraque*: 64. 32 *immo moriundo* l. *immorando*: 65. 28 l. *sicut et* [*a*] *prima*: 67. 13 *minores* l. *motores*: 77. 19 post *forme* om. *et*: 77. 32 post *materia* add. [*et*] 82. 3 om. *non*: 82. 26 *quia* l. *que* (*quae*): 89. 14 < > l. [3° *de Anima*] (see Ar. *de Anima* iii. 9, 432 *b.* 15 *seqq.*): 93. 2 *ubi* l. *nec* (MS. *nisi*): 93. 16 *fit* l. *sit*: 99. 26 *corporum* l. *corporeorum*: 105. 33 om. *est principium*: 108. l. 1 *constringuit* l. *constringit*: 118. 33 post *quod* add. [*non*]: 120. 36 om. *cause* 125. 11 *deaci* perhaps l. *decani* (in the astrological sense): 128. 9 (the editors' unfamiliarity with Aristotle is peculiarly illustrated by their punctuation and emendation of this sentence) *sicut* [*formam*] *rel efficientem solum, sicut aliquando*: here the name of some philosopher or philosophers should be supplied after the first *sicut,* and that of another or others is concealed under *aliquando*: 133. 33 *divinum* cannot be right here; the persons of the Trinity are not at all in question (if they were, Bacon would be committing himself to a gravely heretical position); perhaps *individuum* may be the right reading: 133. 33 *accidunt* l. *accidant*: 138. 28 *utrius* l. *utriusque*: 143. 24, 25 *et in partes essentiales et integrales esset tunc divisibile*; l. *et in partes essentiales et integrales; esset tunc divisible* [*omne compositum in partes hujusmodi*]: 157. 37 *in quantum citate* l. *in quantitate* (v. infra, p. 158. 22): 159. 11 *infinitum* l. *finitum* (cf. infra 159. 18): 161. 11 *licet* l. *scilicet*: 162. 25, 29 *magis* l. *majus*: 179. 9 *aque forte: unde quod* l. *aque; unde forte quod*: 228. 23 ante *materia* add. *aque*: 229. 33 *inordinatione* l. *ordinatione*: 234. 21 *objectionum* l. (as in MS.) *objectorum*: 288. 15 *Athenis* l. *a Thebis* (v. *Phys.* iii. 3, 202 *b.* 13): 309 8 *est variata secundum numerum corrupta* l. *variata secundum numerum est corrupta*: 371. 35 *aliud* l. *aliquid*: 411. 10 *citius* l. *sit ejus.*

There is appended to this *fasciculus* a list of notes and emendations which contains a certain number of references to the authors used by Bacon; but many to Aristotle might have been added with advantage, especially as Bacon's own references (at any rate as given in the Amiens MS.) are not infrequently incorrect; the quotation from *de Ortu Scientiarum* (presumably Kilwardby's) on 72. 8 has not been traced; Boethius *de Musica* i. 2 should have been noted as the source of 99. 9: and where the *Articuli* quoted on 124. 28 (the inserted *de* here is superfluous) is assigned to Nicholas of Amiens, it should have been added for the convenience of students that in Migne's *Patrologia*, the volume and column of which are given, this treatise is printed not as Nicholas's but as the work of Alan of Lille.

C. C. J. Webb.

Language, Truth and Logic. By A. J. Ayer. (London: V. Gollancz, Ltd. 1936. Pp. 254. Price 9s.)

This essay is of special interest as the only systematic presentation by an English writer of a type of philosophy which has a great and a growing influence. The principle of this "logical positivism" is that no statement is significant unless it is conclusively verifiable by sense-experience. Mr. Ayer recognizes that if we accept this principle we shall be driven to find all statements meaningless except those which describe our own present sense-experiences. For no statement of science or of everyday life, nor any assertion about our own past experiences can be conclusively verified. He therefore adopts a modified form of the principle, namely, that no statement is significant unless some sense-experience or other would make it probable or improbable (or more accurately "would be relevant to the determination of its truth, or falsehood").

The logical positivist has a second task. He attempts not only to maintain that significant statements must be verifiable by sense-experience but also to reduce them to statements about sense-experience. This is the function of analysis. It seems doubtful whether Mr. Ayer (with his weakened version of 'verification') should commit himself to the second task. The rigorous logical positivist must maintain that the proposition "Jones feels frightened" is meaningless because it cannot be conclusively verified, but Mr. Ayer, observing the movements of Jones's limbs, can regard these observations as contributing to the probability that Jones is frightened. Yet this very dictinction between the evidence (sense-experience) and the probable conclusion should make it illegitimate to reduce the latter to the former as analysis must, and as Mr. Ayer does when he says (p. 206) that we *define* the experiences of others in terms of their behaviour. The other piece of analysis referred to is that of propositions about physical objects into propositions about sense-contents, an analysis which is familiar to us in phenomenalistic theories of perception. We may note in passing, however, that like other phenomenalists he has to call to his aid in making his analysis "possible sense-contents" (and even in one place a "possible series" of sense-contents). It is doubtful whether possible sense-contents, or even hypothetical facts which elsewhere appear as alternative constituents for the analysis, are legitimate inhabitants of a positivist system.

The real interest of the system for the ordinary reader will probably lie in its negative side. There are many statements which cannot be verified by sense experience. They fall into three classes, those expressing religious, moral, or aesthetic experience; those expressing theological or metaphysical doctrine; and those expressing *a priori* truth. Mr. Ayer maintains that the

first class is made up of expletives, the second of nonsense, and the third of tautologies. The expletive theory holds that when I say "that is right" or "this is beautiful," I am certainly not describing objects or situations; I am merely giving vent to my own feelings. I am not even describing them, so that what I say cannot be true or false any more than an oath or other loud cry. This position, though it is more accurate and thorough than ordinary subjective theories, has nothing more to be said for or against it than has been said often enough by the subjectivists and their opponents.

It is therefore in his critique of metaphysics and *a priori* knowledge that special interest in Mr. Ayer's method will lie. Statements about God and the soul, statements expressive of monism, pluralism, realism, or idealism, all these are nonsense since no sense-experience can contribute to their verification. Now it is true that there is at present a general distrust of these sweeping dogmas and a growing suspicion of metaphysics as a special study independent of logic and science and yielding its own valid results. There is also a recognition that Idealism and Realism are terms covering a number of rather heterogeneous doctrines many of which are not metaphysical doctrines at all. To the elucidation of this complexity Mr. Ayer's book makes many welcome contributions, and in the main his attack on metaphysics as an independent type of thinking with its own methods and its own results is successful. Yet this solution of all the debates of theology and metaphysics by the discovery that both sides have been talking nonsense seems to require more support than it receives from the mere statement of the positivist dogma. It may indeed be difficult to analyse the statement that God exists or impossible to prove that the soul is immortal, yet if a principle requires us to maintain that proof and analysis are not needed because both statements are nonsense, we shall say, "So much the worse for the principle."

In considering *a priori* truth, Mr. Ayer holds as other positivists do that the necessity of such truths is due to their being tautologies. Now "a tautology" should mean a statement in which two equivalent sets of words are found, and therefore one which gives new truth concerning only the *words* themselves. Yet in other positivists (in Wittgenstein, for instance) it usually appears that tautology is not being used in its ordinary sense and that when they say that mathematical propositions are tautologies, they are only saying that mathematics is analytic or denying that it gives new knowledge of fact or rests on any sort of intuition. But Mr. Ayer is here, as elsewhere, clear and consistent; he means what he says. For we are told more than once that "*a priori* propositions tell us nothing except about our use of language." They "record our determination to use symbols in a certain fashion." They "call attention to linguistic usages." And it is true that the inference "If A equals B then B equals A" is not established by sense-observation; yet it is surely clear that it does not record a determination to use the word "equal" in a certain way. It asserts that equality is a reciprocal relation, by whatever symbol you represent it. "If A is to the right of B and B is to the right of C, then A is to the right of C." Here again the truth concerns the relation and not the symbol. For suppose I were devising a new language such as Basic or Esperanto, I might then observe the ambiguity in English between the spatial and the ethical senses of "right" and coin the word "dextral" for the former. But this determination concerning language could have nothing to do with the recognition that this relation which I now call "dextral" is a transitive relation. In the very pages where Mr. Ayer expounds his view he accepts Russell's reduction of all *a priori* inference to apprehension of the formal relationships of classes. Yet surely these relationships are independent of and unaffected by the symbols we may choose to use for "all" and "or"

and "not" and "class." It is true that Mr. Ayer sometimes says that *a priori* propositions reveal not merely linguistic usage but also "the implications of this usage." But I hope the examples given above make it clear that the implications have nothing to do with the language and its usage. They are implications of the formal relationships represented. The positivist theory seems like the verbal magic of savages or as if one should maintain that what happens to a man who lies down in front of a train is due to the fact that he calls it a "train."

These three negative sections of Mr. Ayer's book would no doubt be claimed to stand on their own evidence. The expletive theory of morals or the nonsense theory of theology would be defended by recognition of the failure of their rivals and their own success. Yet the feeling is strong upon the reader and indeed frequently expressed by the author that he *must* say what he does about ethics and metaphysics and mathematics because of his initial dogma that "significant" means verifiable. It is this thoroughgoing consistency which gives its main attractiveness to the essay and for which even the most violent dissentient may welcome it. But this welcome would not satisfy Mr. Ayer, for it would reduce his work, on his own theory, to a collection of tautologies whose repeated refrain is itself the tautology that "significant" means verifiable, and the book would be then no more than a record of its author's determination to use the English word "significant" in a certain way, along with the implications of that determination. The dissentient, however, could stick to his more polite view that it is the effective and vigorous working out of a philosophical theory which has much incidental success in clarifying the issues and which was well worth undertaking with such spirit and acuteness.

J. D. Mabbott.

Aristotle's Physics. A revised text, with introduction and commentary, by W. D. Ross, Provost of Oriel College. (Oxford: Clarendon Press. London: Humphrey Milford. 1936. Pp. xii + 750. Price 36s. net.)

As Hegel remarks in the introduction to his *Naturphilosophie*, there is more of the philosophy of nature than physics in the *Physics* of Aristotle, and at a time when distinguished physicists are reviving interest in the concept of nature and in the philosophical study of the field of science, it is not surprising that philosophic attention should be focused once more on the *De Physico Auditu*. Last year saw the conclusion of the useful Loeb Library edition by Professor Cornford and the late Dr. Wicksteed, and the reissue in Germany of Prantl's translation, first published in 1854; and this year has now given us what the Oxford Press Bulletin does not hesitate to call "the standard edition" by the Provost of Oriel. 'Standard' it must undoubtedly be in the sense that upon it any future study of the *Physics* must be based. A work of this kind a reviewer studies for his instruction, and any criticisms that he advances must be hesitating and diffident: for Mr. Ross has no equal in the field of Aristotelian philology, and this volume exhibits once more to the full his encyclopaedic knowledge of the Aristotelian corpus and his acute insight, the fruit of solid learning, into the meaning of even the most obscure of Aristotle's sentences; and it goes almost without saying that the commentary in this volume, as in the edition of the *Metaphysics*, is the work of a master of lucid and concise exposition.

The text has been established after the recollation of some MSS. and the collation of Vindobonensis 100, which had not previously been collated for the *Physics*; and there will be few who will not rest content to take Mr. Ross

for their guide both in the text itself and in the two sections of his introduction on the "structure" and the "text of the *Physics*." His *apparatus criticus* is comprehensive and in the notes his reasons in support of the reading that he adopts are clearly stated and generally carry conviction. Some of Professor Cornford's *prima facie* plausible emendations in his second volume (e.g. at 230^b 18) are rejected without mention, but Mr. Ross's edition had probably reached the proof stage before that volume was published.

To the understanding of Aristotle's argument in detail, Mr. Ross contributes in addition to his comprehensive commentary a careful and illuminating analysis of the whole argument, occupying 120 pages, printed continuously, and not, as in the edition of the *Metaphysics*, interspersed through the commentary, prefixed to the several chapters. The elucidation of the *Physics* sentence by sentence, however, can be but the necessary prelude to the exposition of the meaning of the work as a whole; and it is here that Mr. Ross's edition perhaps begins to be a little disappointing. To quote from his introduction (p. 42): "Most inquirers about nature, Aristotle remarks . . . merely try to trace the sequence of events"; in this edition of the *Physics*, "the sequence of events" is traced for us with a masterly hand, but here, as in the edition of the *Metaphysics*, Mr. Ross says that he has refrained from writing at greater length in his introduction on the philosophical significance of the sequence of Aristotle's doctrines on the ground that his book was long enough already, and that he could not impose further on the patience of his readers. His readers, however, are likely to regret his decision, for the interest of most of them seems likely to lie above all precisely in what he has refrained from giving them.

He devotes eighty pages in his introduction to "Aristotle's Natural Philosophy"; most of these pages report "the sequence of events"; when they do more, they become perplexing. For instance, readers will turn eagerly to the section on the Paradoxes of Zeno; but whether what they find there will satisfy them perhaps admits of doubt. Zeno has not been answered, Mr. Ross holds, by either Aristotle or modern mathematicians; but he does not explicitly deal, although he mentions the various statements of Aristotle on which it is based, with Hegel's interpretation of Aristotle's argument, which does seem to provide an answer difficult for Zeno to meet. His bibliography of the paradoxes extends for two printed pages, but it does not include Hegel's name, nor is there any hint that it was from his study of Hegel's logic that Noël, who is mentioned, drew his inspiration on the subject.

Mr. Ross points out that two of the paradoxes are based on the assumption of infinite divisibility (motion as continuous), and two on the assumption of divisibility into a finite number of indivisibles (motion as discrete) (p. 84). Aristotle, Mr. Ross says, "argues convincingly that every continuum must be infinitely divisible" (p. 70), and yet "equally firmly asserts and argues for the existence of indivisible nows" (p. 71). If these statements are put together, is Aristotle's answer to Zeno's paradoxes not in effect similar to Hegel's answer to Kant's antinomies, namely, that the continuous and the discrete are the opposite inseparable moments of which motion is the concrete unity and that if one is severed from the other by the analysis of motion into its constituents, paradoxes and antinomies must result? (A similar argument surely lies at the back of *Physics*, I, 5.) Mr. Ross may find the doctrine of the real as a synthesis of opposites unpalatable, but not to expound it as the reply to Zeno in *Physics*, VI, 9 is to do less than justice to Aristotle.

Mention may perhaps be made of one or two other places where philosophical, as distinct from philological annotation, might have been supplemented: (i) Mr. Ross seems to be clear (pp. 41, 524–5) that in Aristotle's view

there is no real contingency in nature. Does this take sufficient account of his sometimes holding that the possibility of purpose necessarily implies a real indeterminateness in things (e.g. *De Int.* 19^{a} 30 ff.)? (ii) Is 185^{a} 2–3 (*ἀνελόντα τὰς ἀρχὰς*) not a reference to *Rep.* 533^{c} (*τὰς ὑποθέσεις ἀναιροῦσα*), and when the Greek commentators refer to 'dialectic' in notes on the passage (Ross, p. 461), may it not be Plato's dialectic that they have in mind? (iii) 237^{b} 13–22 might have been used by Professor Collingwood as Aristotelian support for his doctrine that "the lower end of the scale of forms lies at unity" (*Method*, pp. 81 ff.); but in affiliations between Aristotle's doctrines and contemporary thought Mr. Ross does not seem to be much interested, or he might have suggested that it is not Aristotle alone who fails to "see the difficulty of supposing a finite material universe with nothing whatever, not even space, beyond it" (p. 53).

T. M. Knox.

Descartes: An Examination of Some Features of his Metaphysics and Method. By W. A. Merrylees, M.A., B.Litt. (Melbourne University Press, in association with the Oxford University Press. 1934. Pp. xxviii + 330. Price 12s. 6d.)

Mr. Merrylees' work does not pretend to be a general exposition of Cartesianism. Its Preface tells us that the author limited himself to dealing with those questions to which he believed he could make a useful contribution and that his main object was to return their true answers. The consequences of this self-imposed restriction are in no respect unfortunate. Mr. Merrylees has dealt with what most attracts him. By restricting his field he could explore the subjects he selected more fully and had sufficient space at his disposal to examine systematically positions which, as formulated in the text, seemed to him ambiguous or obscure. He has produced a most stimulating and useful book. For perhaps what is most required of present philosophical scholarship is expertly judicious and thorough interpretation of certain complicated and often less obvious themes which have predetermined characteristic features in a great thinker's ultimate position. Mr. Merrylees has helped towards this end, though in his book unity of theme is less apparent than diversity of subjects. Yet the questions selected are undoubtedly major ones, and the author guides us, though sometimes by very labyrinthine paths, through at least the central plateau of Cartesian metaphysics and methodology. His discussions are uniformly thorough and often acute, yet I must confess inability to see eye to eye with him on a number of his interpretations of Descartes' meaning and on a number of the answers he regards as the true ones.

The matters of which Mr. Merrylees attempts to determine the sense and the soundness are: Doubt and Certainty, the interpretation of the Cogito, the epistemological significance and metaphysical value of the proofs of God's existence, Ideas, Judgment, and the Method. And of the ten chapters on these subjects, the five treating of the third, fourth, and fifth seem the most valuable. The last two chapters on the Method have somewhat the air of an appendix, for the topics there examined are brought into little close or clear connection with the doctrines about ideas and judgment or with the more metaphysical part. In this, no doubt, Mr. Merrylees but continues a tradition. But it is surely one that calls for correction, and the reader might reasonably have expected him to have established the connection in some detail since Mr. Merrylees is not one who thinks Descartes' method to be a method of science only and not one of metaphysics. Perhaps the reason for

the omission is partly to be found in Mr. Merrylees' decision that the doctrine of simple natures (a central one in the *Regulae*) is "valueless." The only ground I can find for this is that various simple natures are 'simple' in very different senses and the only sense of simplicity which covers them all is a superficial one. Mr. Merrylees' treatment of these unduly neglected entities, though full and interesting, is not very satisfying, and one wonders whether he has clearly seen to what his admission of the universal applicability of the method commits him. Ample and interesting, too, are the discussions of intuition and deduction (Ch. IX), though they are somewhat clouded in consequence of a troublesome and dubious distinction drawn between *four* kinds of doubt in Ch. I. There he first distinguishes "psychological doubt" (which we feel or experience) from "logical doubt" which is differentiated from the former by the fact that "we perceive a ground is required," or that "there are certain reasons for regarding the matter as doubtful." Both are next distinguished from "subjective" and "objective" doubt and certitude. The course and fortunes of Descartes' methodical doubt are explored by the aid of these four distinctions, but I find the issue confusingly involved, and their baneful effects are to be descried later in the book, particularly in Ch. II on the Cogito. Of the former antithesis I suggest that though there is a valid and important distinction to be made, Mr. Merrylees' "logical doubt" (as formulated above) misrepresents Descartes and misses his point. Descartes does not regard arithmetical truths as "doubtful" in the sense suggested. Though not doubtful they are nevertheless such that a doubter could doubt them without thereby contradicting himself. That the author has misrepresented Descartes is clear from the fact that a proposition which we have no reason to doubt (exempt from "logical doubt"), and which is not dubious (exempt from "psychological doubt"), Descartes, none the less, requires to be submitted to his *methodical* doubt. That is, such proposition is to be *supposed* false, though not asserted or believed false, in order to show, if possible, that it is necessarily true. And Mr. Merrylees' second distinction tends to confuse and seems to serve little purpose. His "objective" certainly consists in "subjective" certainty being justified or valid, from which I infer that "subjective" certainty is the same as unjustified "psychological" certainty. So far as I can see, the second distinction is designed to facilitate the discussion of a problem which might be put: How can we be certain that the certainty by which we think we are justified (and therefore possessed of "objective" certainty) is itself a "logical" and not merely a "psychological" certainty? (I suspect there may be no real problem indicated here, or, if there is, that we never could come by a certainty of the kind sought.) In Ch. II Mr. Merrylees treats at length the consequences of a dilemma which he believes to confront Descartes. But the "dilemma" arises from Mr. Merrylees erroneously supposing that Descartes can be certain of the Cogito only because he has the prior certainty that whatever is clear and distinct must be true (pp. 13, 16). But surely Descartes would maintain that until we are assured of the Cogito (independently of the criterion) we *have* no criterion—the most we could have would be the surmise or hypothesis that *perhaps* clearness and distinctness is a mark of truth. Descartes is further interpreted as *inferring* (though non-syllogistically) his existence from a state of thinking. Two illicit suppositions seem to be responsible for this, viz. (i) that what can be *defended* by inference or argument cannot have been *discovered* except by inference; and (ii) that we cannot *intuit* or perceive the implication of one character by another (both characters being present to intuition), but can only *infer* one character (not intuited) from another character (intuited) which implies it. These errors lead Mr. Merrylees in Ch. III

to ask the very strange question: "Does the Cogito *prove* that I actually do think?" and to deny that the Cogito "first takes us to existence." Surely the Cogito neither proves nor is intended to prove anything, and his attempt to settle whether the Cogito "establishes" this and that is presumably due to his supposing (as title of Ch. III suggests) that the Cogito is a premise or a principle of inference.

The chapters on God's existence (IV–VI) and on Ideas (VII) are the best in the book. In Ch. VII he extracts and generalizes from various passages eight possible meanings of Idea in Descartes. These are then shown to be variants of four ultimately distinct conceptions, of which two are rejected, and the one retained as being the least inconsistent with all Descartes' utterances is that of "an intermediary mental object which represents a real object by somehow repeating its character." Point is given to the last clause by an *éclaircissement* on representation, and there follows a very good discussion on the causality of ideas and helpful analyses of Descartes' use of 'know' and 'think.' The refutation of Descartes' theory of judgment on the ground that all perceiving is judging, whether convincing or no, is certainly stimulating. I cannot, however, even hope to do justice within my very limited space to a book in which each topic is so thoroughly hammered out and the discussions are so close and detailed. That I have dwelt more on my disagreements with the author than on the excellences of his book is not incompatible with my sincere admiration of it. Every student of Descartes should consider it attentively.

S. V. KEELING.

Possibility. Lectures delivered before the Philosophical Union of the University of California, 1933. (Berkeley, California: University of California Press. 1934. London: Cambridge University Press. 1935. Vol. 17. Pp. 224. Price 10s.)

The Philosophical Union of the University of California are adepts at choosing important problems of contemporary interest as the topic for their annual philosophical lectures. The members of the Union must have a pleasant time, interchanging their views and developing them by mutual discussion. The results nearly always make interesting reading for those less pleasantly situated. The lectures published in the volume now being reviewed were delivered in 1933 and published in 1934; it seems to have taken some time for the volume to reach this side of the Atlantic. The topic—*Possibility*—is an extremely difficult one. Very different answers have been given to the question, "What is Possibility?" The sort of answer one is likely to find acceptable will be determined by one's philosophical outlook. Some would consider the question to be improperly formulated. The present reviewer belongs to the latter class, and can hardly hope to avoid undue bias in reviewing the various theories propounded in these lectures.

The word "possible" occurs in many different usages; it seems often to be assumed that there must be some central notion present in each occasion of its diverse use. It is doubtful whether there is. At the outset it is important to determine whether "possible" is being used in opposition to "impossible" or to "actual" or to "improbable," or in some other way. Many of the contributors to this volume have seen the importance of distinguishing these different usages, but some of them seem to suppose that, when this has been done, questions of the same form can be asked with regard to what is being said in the case of each of these different oppositions.

This is surely a mistake. It inevitably leads to the supposition that *possibility* is a species of something, or to hypostatization in some form or other. The question of the relation of *the actual* to *the possible* gives some of the contributors a good deal of trouble. Prof. Pepper (in "A Contexualistic Theory of Possibility") asserts that "the actual is in greater opposition to the possible than is the impossible. Or, to state the matter the other way round, there is a set of connotations such that the impossible is more possible than the actual. For, according to that set of connotations, the actual is not even possible; it is. The actual is neither possible nor impossible. It is not in any way hypothetical; it is categorical. It is" (p. 179). If by this is meant that it is equally senseless to say "the actual is possible" as to say "the actual is impossible," then it would seem that it is as senseless to say "the impossible is more possible than the actual." Prof. Pepper, however, does not find it nonsensical; he finds only a "tangle of paradoxes." He proposes to straighten out the paradoxes by substituting "specifiables" for "possibilities." There is a hierarchy of specifiables, of which the lowest level is the actual; all other levels are possibilities. In every level except the highest and the lowest is a field of possibilities, specified by definite conditions, and a "complementary field of impossibilities inconsistent with the conditions." The highest level, the apeiron, has no conditions; hence, in it there are no impossibilities. In the lowest level there are no possibilities since "the actual has nothing but conditions." It is difficult to see the force of this antithesis and to understand what is meant by "the apeiron." Prof. Pepper's recipe for understanding it is as follows: "We first imagine some set of conditions and then imagine these conditions and any other conditions negated. We imagine the apeiron, in other words, only by conceiving an opposite and then hypothecating the negation of that opposite. It differs from nothing simply by being absolutely anything" (p. 180). It is not easy to see wherein this difference consists. Prof. Pepper does not afford any help in this difficulty, but passes at once to an account of actuality in terms of time, and to a discussion of past and future. In this discussion he seems to me to confuse *possibility* with *uncertainty*.

Prof. Lowenberg is perhaps also a contextualist, though not of the same type as Prof. Pepper. In his lecture ("Possibility and Context") the influence of Leibniz is apparent, especially in those respects in which Prof. Lowenberg would most strongly dissent from Leibniz's statements. He rejects the view that the possible is prior to the actual only to replace it by the equally unintelligible view that the possible is the coactual. "Because sugar is capable of being dissolved," he says, "I regard its solubility as coactual with its solidity. But the capacity of sugar to be dissolved foreshadows an eventual state competing with its actual solid state. The coactual, being the rival of the actual, may become the actual, and when it does, an alternative has triumphed and taken possession of the field" (p. 94). However complicated the situation, "the status of the possible remains the same." Finally, "the possible is but the actual in embryo lying in the womb of a context" (p. 104). This metaphor (if it be meant as a metaphor) does not make the view taken at all clear. It is odd to think of the possible as a *rival* of the actual, or as an *embryo* lying in a womb, though no doubt such language is suggested by Leibniz's treatment. But Prof. Lowenberg himself cautions us not to hypostatize possibility. "Possibility," he says, "is a substantive in form but an adjective in intention" (p. 83). Difficulties arise once we allow ourselves to frame the question—"What is the ontological status of Possibility?" Prof. G. P. Adams seems to be aware of these difficulties. He distinguishes between "the actual," "the trans-actual," and "the hyper-actual." The trans-actual is the realm of possible experience. The distinction between actual and possible

(in this sense) is said to be dependent "upon us, upon the position we chance to occupy, the direction of our attention, our powers of observation, and the like." Somewhat surprisingly Prof. Adams calls this an "epistemic" distinction. The hyper-actual is altogether different, and differs constitutively from the distinction between the actual and the trans-actual. The latter are called "continuous possibilities," the former are "transcendent possibilities." But we must not take these transcendent possibilities to be subsistents "transcending all that exists." Prof. Adams wishes "to avoid the Scylla of such a realm . . . and the Charybdis of a view which finds nowhere a legitimate place for objective possibilities" (p. 9). But the title of his lecture, namely, "What makes Possibility Possible?", tends to throw him into the arms of Scylla. If he were to avoid this kind of question, he might be able to secure what he calls "objective and constitutive possibilities," by discovering that there are no *species* of possibilities.

Prof. V. F. Lenzen (in "A Positivistic Theory of Possibility") says that "in a positivistic interpretation [of science] we must not raise the question of the ontological status of possibilities while they are merely possibilities" (p. 75). But he also suggests that there is "a more ultimate question of the ontological status or ground of possibility" (p. 67), which is not the topic of his lecture. This suggestion is unfortunate, and accords ill with his positivistic treatment of possibility as relative to "a realm of discourse." His definition, "A possible entity is one the nature of which is in conformity with the conditions of laws governing that type of entity," indicates what I should call a "legal" view of possibility. But the "ontological vocabulary" dominates his discussion. I believe that his theory could be so reformulated as to be freed from this defect.

Prof. P. Marhenke (in "Possibility and Significance") accepts a "legal" view of possibility, based upon the doctrine of types. His lecture is, in my opinion, the most interesting and the most important of these contributions to the topic under discussion. It does not admit of detailed discussion in the space at my disposal, and it cannot be summarized to advantage. It must suffice to say that Prof. Marhenke considers that "A is possible" and "A is impossible" must be interpreted in terms of significance, that there are different levels of significance, and that "the relation of the possible and impossible to the significant is the same at each level of significance." To determine what is possible is to determine the conditions of significance. This is by no means always easy, but it is at least a problem capable of being precisely stated. One of the difficulties of determining the conditions of significance is amusingly illustrated in the requirement that we should be enabled "to relegate to the class of the nonsensical the sentences of James Joyce and Gertrude Stein (some of them, at any rate), while leaving significant the sentences of less advanced authors (p. 159).

Prof. D. S. Mackay (in "The Limits of Possibility") provides an interesting discussion of the distinction between the conceivable and the possible, and he stresses the importance of considering "the several senses in which a possibility may be affirmed or denied" (p. 147). Mr. E. W. Strong (in "The Possible and the Actual") ranges over a variety of topics. His lectures show how difficult it is to avoid elaborating platitudes instead of clearing up difficulties. Prof. W. Savery (in "Possibility and Pluralism") takes up the problem from the point of view of Concatenism. This is the view that "the universe is a chain of beings or individuals. There is overlapping of the links but there is no inclusive being" (p. 219). His discussion is somewhat too disconnected to be clear to a reader unfamiliar with his views. Prof. R. W. Church (in "Possibility and Identity") makes an attempt to settle "the status of the

possible" by regarding the predicate "possible" as meaning what is meant by "qualities and relations being intrinsically individuated and self-identical and therefore repeatable" (p. 28).

Anyone who attempts to read these lectures steadily through, one after the other, is likely to suffer from mental indigestion. Nevertheless, the volume is well worth reading, especially in small doses. It raises many interesting questions in a way which should stimulate the reader to ask himself further questions. Much that is said suggests that it would be desirable to attempt to analyse the syntax of sentences in which the word "possible" (and its variants) occur. It is to be hoped that Prof. Marhenke may some time or other devote a whole volume to this problem of analysis.

L. Susan Stebbing.

God and Creation. Three Interpretations of the Universe. By John Olaf Boodin, Professor of Philosophy, University of California at Los Angeles. (New York and London: The Macmillan Company. 1934. Pp. 519. Price 12s. 6d.)

Professor Boodin "came out," so to speak, as a philosopher with a Dissertation on Time in 1889, and he has, to use his own words, "fought for real time" ever since.

In the present book he gathers up the fruits of his long and patient studies into the philosophies of the past and present, from this point of view.

Different philosophies represent different interpretations of the universe, and from the point of view of their attitudes to the time process these interpretations fall into three well-defined groups, which Professor Boodin brings under the heads of preformation, emergence, and creation.

The basis of the doctrine of preformation can be expressed in the fragment of Anaxagoras that "nothing comes into being or passes away, but there is mingling and separation of things that are," or more picturesquely in a statement of Heracleitus, that "time is a child playing draughts." Time, that is, makes nothing new, it only shifts the pieces.

In Part I this preformation doctrine is followed out in its main representatives from ancient to modern times.

As against this view, the doctrine of emergence insists that in the process of time something new arises which was in no sense present before, so that there is not merely a shifting of pieces whose natures are uninfluenced by the shifting, but a process of genuine growth.

The word emergence is, as the author insists, not the happiest one to describe this process. A duck emerges from the water into which it has dived in pursuit of food. Emergence in this sense would involve preformation. The word Professor Boodin prefers is epigenesis. The motion emphasized in this word is that of time's passage, and of the entrance of novelty upon the scene. Professor Boodin regards it as fundamental to the notion of epigenesis that it should not include the notion of guidance or control, either within the process itself or from without. If to the notion of the entrance of novelty we add the notion that there is some "actuality" controlling and animating the course of history, we get a third notion, that of creation.

The division then of world views into three can be expressed by the two dichotomies: What comes in time is either not new (1) or it is new. If it is new, its arising is either not controlled by something existing (2) or it is controlled by

something existing (3). On (1) we have preformation, on (2) epigenesis, on (3) creation.

It will be obvious on reflection that the notion of creation so defined is a very wide one including a number of alternatives ranging from the supposition that the creative control is carried out under the guidance of a plan completely formed from the start by a being completely actual from the start, to the supposition that the control comes from within beings themselves in process of epigenesis, this control being slight and unconscious at first, gradually becoming more influential and in some beings at least gradually arising into consciousness. Historically it is only the former type that counts; and Professor Boodin shows, in his journey from Plato through Aristotle and Plotinus to the great thinkers of the Christian Church, what variations are possible within this type of view.

The hypothesis of emergence or epigenesis as limited by Professor Boodin, leaves its advocate practically nothing beyond the task of considering the evidence of fact which can be adduced in its favour, and of chronicling the various successive stages which arise in the history of the time process; it is thus more akin to science than to philosophy. Accordingly the author devotes the bulk of this section of the book to an account of the evidence for emergence in physics, in biology, and in psychology. These three chapters have all the writer's customary clarity, width of knowledge and discernment, and show how fully he is at home with the recent trends of thought in the sciences.

The reader of these chapters who turns next to the third section, on theories of creation, will discover, perhaps to his amazement, that Professor Boodin is equally at home in the field of ancient and mediaeval philosophy. The chapters on Plato and on Aristotle are full of interest, and deserve careful study not only by the reader who wishes to get a general view of the progress of human thought, but also by the specialist in Greek philosophy.

The writer apologizes for one section of his treatment of Aristotle (pp. 362 ff), where he doubtless feels that entering on the difficult field of textual criticism he may find himself warned off as a rash trespasser. For my own part I think that this section ought to be welcomed. Professor Boodin is clearly no outsider in textual matters, and his skill in interpretation of philosophical ideas justifies the closest attention being given to his suggestions. (Something has gone wrong with the printing of the Greek text on the top of page 363; it is correctly printed lower down on the same page.)

Professor Boodin is to be congratulated on what we might call his History of the Philosophies of Time, so wide in its range, so admirably planned, and so well written.

L. J. Russell.

Riddell Memorial Lectures. Eighth Series. General Subject: Evolution and the Christian Conception of God. Delivered before the University of Durham at Armstrong College, Newcastle-upon-Tyne, November 1935, by Charles E. Raven, D.D., Regius Professor of Divinity in the University of Cambridge. (London: Oxford University Press: Humphrey Milford. 1936. Pp. 56. Price 2s. 6d. net.)

In these Riddell Lectures the Regius Professor of Divinity at Cambridge is concerned to insist upon the importance to Christian theology of recognizing in the Incarnation of God in the person of Jesus Christ, the affirmation whereof is the central doctrine of the Christian religion, not an intrusion from without into an alien world, but rather the crown of a creative process which we

have in these last days learned to regard as in its method evolutionary. Such insistence is of course a characteristic note of Christian thought since the early days when the Church rejected Marcionism with its denial that the author of nature and the Father of our Lord Jesus Christ were one and the same God. But in view of the present prevalence in some quarters (for example, in the movement associated with the name of Karl Barth) of a tendency in a direction which recalls that of Marcionism, it is not untimely to have the confession of the ultimate unity of the source of nature with that of grace, of the Creator with the Redeemer, emphasized as the presupposition of a reconciliation of science and religion, now too often supposed to be necessarily in mutual conflict.

Dr. Raven writes as a theologian with a training in natural science rather than as a philosopher by profession; and although he points out the ambiguity involved in the use of the term "evolution" both for the dissipation of energy by entropy and for the development of living organisms which culminates in mankind, he does not enter upon such a thorough investigation of the meaning of that "blessed word" as is to be found, for example, in Mr. Joseph's Herbert Spencer Lecture on "The Concept of Evolution," now reprinted in his *Essays in Ancient and Modern Philosophy*.

Of Dr. Raven's three Riddell Lectures, one is devoted to the Unity of Creation, a second to the Emergence of Deity (by which is not meant what it means in Professor Alexander's philosophy, for Dr. Raven certainly does not intend to deny the priority of God as Creator to the universe, but only the emergence of a nature in which God can become incarnate), and the third to the Energy of the Spirit. In this last the writer pleads for a more intensive study by Christian theologians of the doctrine of the Third Person of the Trinity, which he considers to have received less than its due share of attention, to the loss of what might have been a powerful aid in the religious interpretation of natural phenomena.

When Dr. Raven remarks (p. 44) that "if anyone had suggested at any period between the reign of Constantine and the Reformation that the work of poets, musicians, scientists, or craftsmen was a ministry of the Spirit his outlook would have seemed absurd, and even blasphemous," the exaggerated language indicates, as indeed do other parts of his book, his unfamiliarity with the thought of the Middle Ages. No doubt the identification of the Platonic *Anima Mundi* and the Holy Spirit by the school of Chartres, and at one time by Abelard, came eventually, under St. Bernard's influence, to be regarded as inconsistent with orthodoxy—but, although obviously presenting a difficulty in view of the *holiness* which from the beginning was recognized as characteristic of the divine power manifested in the life of Christ and of the Church as participating in that life, this identification seemed to many in the Middle Ages a natural one. Indeed, the Reformation, in reaction from the authority attributed by the Schoolmen to the Greek philosophers, and especially to Aristotle, tended probably on the whole to an increased emphasis on that "dualism of nature and grace" to a care for which Dr. Raven is disposed to trace the lack of sympathy with the progress of natural science which has too often been exhibited by theologians. One would have welcomed a clearer recognition on Dr. Raven's part than we find of the truth, as I take it to be, that the health of Christian theology depends upon the maintenance of a due tension between faith in One God as the author alike of creation and of redemption, and realization of that difference between nature and grace which is implied in "the sense of contrast characteristic of the twice born," in which he himself tells us (p. 37) that his "own experience of Christ" began.

The statement (on p. 51) that the Holy Spirit is not "the sole divine Being" is, coming from a Regius Professor of Divinity, surprisingly loose; but we may be sure that Dr. Raven is not really a polytheist. On p. 6 we should read "Lyell" for "Lyall," and on p. 51 "J. S. Haldane" for "J. B. Haldane."

C. C. J. Webb.

Creative Society, a Study of the Relation of Christianity to Communism. By John Macmurray. (London: Student Christian Movement Press. 1935. Pp. 196. Price 5s. net.)

It is impossible to do justice to the importance and the interest of this volume by a detailed examination of its contents within the limits which must necessarily be assigned to this review. It is a lucid, forcible, and challenging expression of intense personal conviction as well as of learned historical survey. The author writes from the Christian standpoint, as he understands it, but with thorough appreciation of the aim of Communism, although he fully recognizes its defects. "I have no doubt in my own mind that the Christian conception of God and the substance of the Christian Gospel expresses much better than any Communist theory the truth about human life. I am sure that the rejection of God and of religion in Communist theory makes its understanding of human reality dim and limited, and in practice hampers and diverts its efforts, and may, in the long run, frustrate them. I am equally convinced that a Christianity which remained true to the revelation of God contained in its own Gospel could achieve the purpose which Communism seeks to achieve through its rejection of religion, more easily, more certainly, and with a fuller understanding of the real issues which are involved. But this would depend upon the Christian belief in God being real and practical" (p. 28). As for the author, a belief in God is the expression in action of an attitude of faith or trust, "which necessarily delivers a man from fear and self-centredness" (p. 20), he disregards and dismisses much which has had a prominent place in Christian theology, and much of the religion of the Christian Church he condemns as pseudo-religion. To discuss this subject here would carry us beyond the realm of philosophy. I am content to record my own opinion that the judgment is too severe and needs to be more moderately stated. For the author, Christianity is the religion of Jesus, and of this he gives a discerning and appreciative account. On most points I am here in agreement with him, but must regard his statement as inadequate, as dominated too exclusively by his interest in life in community in this world. The horizon is, however, widened in the sixth chapter in the *Eternal and the Temporal*, in which theism is asserted over against the insufficiency of humanism. "Only the idea of God is wide enough to represent the synthesis of all things, the restoration of the unity which is broken by the emergence of rational consciousness. Only real religion can achieve the synthesis of the eternal aspect of personal life with the temporal" (p. 95). In dealing with *the Dialectic of Christianity* in Chapter VII, he does not confine that process to organized religion, but includes "the full social process of Europe" which has been Christian (p. 128). He holds that "in broad outline the Communist principle of explanation is satisfactory, resting as it does upon an analysis of the economic factors which determine the general form of social changes" (p. 132); but the Communist overlooks two points, first the revolt of the common folk against some aspect of the existing social order as a factor in Christian organization, and second the necessity of religion for any

human community. In its exclusive stress on the hunger-motive (economic) Communism ignores the love-motive (social or religious). This love-motive (tribal or national) Christianity has universalized. The opposition of Communism to Christianity is due to the neglect of the hunger-motive by Christianity and of the love-motive by Communism. It is on this assumption of the complementary character of Christianity and Communism that their present relations are discussed. When Christians restore to organized Christianity the element it now lacks, it will supplant Communism as meeting the need that it stands for. The last chapter brings us into "the Contemporary Field of Action," and the volume ends on a note of hope. "It is in England, if anywhere, that Christianity provides the answer to the situation" (p. 192). May I warmly commend this book for serious consideration?

A. E. Garvie.

Magistri Eckardi Opera Latina auspiciis Instituti Sanctae Sabinae in Urbe ad codicum fidem edita. Fasciculus XIII. Quaestiones Parisienses edidit Antonius Dondaine, O.P. Commentariolum de Eckardi Magisterio adicenxit Raymundus Klibansky. Lipsiae: 1936. Pp. xxvii, 58. RM. 650.

What is to be reckoned as the thirteenth *fasciculus* of this admirable edition of Eckhart's Latin works contains *Quaestiones Parisienses*, edited by Père Dondaine, with a *commentariolus* by Dr. Klibansky prefixed, dealing with the activity of the great mystic as a teacher in the University of Paris. These *Quaestiones* are derived from two manuscripts, one at Avignon, the other in the Vatican Library. Those taken from the Avignon MS. seem to belong to the years 1302–3; they deal with the relation of *intelligere* to *esse* in God and in the angels; and are accompanied by a discussion of the respective claims to primacy of the understanding and the will, of knowledge and love, in which Gonsalvo, the master of Duns Scotus, a Franciscan master expelled from France by Philip the Fair in 1303, defends those of the will against the arguments of "Equardus" on the other side of the controversy. Those from the Vatican MS. are concerned, one with the nature of motion, another with the body of Christ; the former is assigned by the editor to the years 1311–12, the latter to some period before 1314. These are ascribed in the manuscript itself, the first to "Ayerdus," the second to "Aycardus"; and there is no reason to doubt that they are Eckhart's. Some others, interposed in the manuscript between the two, do not bear his name, and are by the present editors considered as probably not his; they are, however, printed by them as an appendix to those which are assigned to him. The Avignon *quaestiones* have been previously published by the learned Franciscan P. Longpré, and both these and the Vatican *quaestiones* by Grabmann and by Geyer. On these labours of his predecessors the present editor, P. Dondaine, passes (p. viii) the following judgment: *Suo quaeque editio merito commendatur; prima aetate, secunda plenitudine materiae, tertia acumine critico excellit.*

Dr. Klibansky in his "little commentary" shows the agreement of the doctrine maintained by Eckhart in these *Quaestiones Parisienses*, that *ipse Deus est ipsum intelligere et non est esse* with that to be found in his German writings, where we read that "vernünftekeit ist der tempel gotes," and "wesen ist sin vorburg" (p. xvii). Twenty years later, however, in the prologues to the *Opus Tripartitum* (which have already appeared in this edition, with Dom Bascour as editor), his cardinal position is *esse est Deus*. But, despite this difference in respect of *esse*, he did not cease to follow St.

Thomas (and, as Dr. Klibansky notes, to agree with Dante) in ranking understanding before will, knowledge before love.

The editing of the text is such as to inspire confidence, even where one finds difficulty in translating: but must we not, to get the right sense, read *assumitur* for *assumit* in 32, 10?

C. C. J. Webb.

Storia della filosofia. Parte prima. La filosofia greca. By Guido de Ruggiero. Terza edizione. (Bari: Laterza & Figli. 1934–5. Two volumes. Pp. 396; 346. Price lire 45.)

In this third edition the author presents a text so fully re-written that he submits it as a new work. The two volumes extend from the Pre-Socratics to the Neo-Platonists. The demand for such a comprehensive survey, proved by the exhaustion of two editions, is both a tribute to the excellence of this work and a symptom of the fewness of native surveys of similar scope (and the histories of Zeller and Gomperz are only now in course of translation into Italian).

A short review can draw attention to only relatively random points. The introduction discusses with common sense as well learning the disputatious problems of the relations of the first philosophers to Oriental thought and to the theogonies and mystery-cults of Greece, the conclusion being, in effect, that however much we may demonstrate that the thought of Thales and his successors had specific historical conditions, that thought was more than a selection of oddments from or a natural residue of these. But he recognizes that any interest in the school of Miletus can be only antiquarian and passes on quickly to their successors. Under Socrates the Burnet-Taylor theory is discussed in a note and sharply dismissed: an attempt might have been made at least to show its value as compelling us to admit the hazard in *any* account of what Socrates and Plato thought severally. The treatment of Aristotle, less conventional, is refreshing. While admitting what the Germans would call the philological value of Jaeger's work, Professor de Ruggiero contends that the genetic approach can never do for Aristotle what it has done for Plato, because the inquiries of the former were attended at every stage by the ideal of system, whereas the inquiries of the latter arose and shaped themselves with reference to current discussions; besides, Aristotle moved away from Platonism only to return in the end to a position that, when compared with anything outside Plato, has all the appearance and savour of Platonism. This interpretation is summarized and driven home in the paradox that it was in Aristotle, not in Plato, that the philosophy brought down by Socrates to the market-place returned to the empyrean, since it was Aristotle, not Plato, who in metaphysics preferred the apodeictic to the dialectic method. Of the post-Aristotelian systems there is a well-ordered account, unsympathetic to Stoicism, and, like all other accounts, failing in what seems to be the impossible task of bringing Neo-Platonism to logical clarity and articulating its deep and perennial philosophical appeal. The death of Plotinus, by the way, is put at 289 instead of 270: I know of no grounds for changing the date given by Porphyry. A full and excellent bibliography is appended, in which English works are adequately represented.

The work has the merit that one takes for granted in anything that comes from this author's pen and which it would be impertinent to praise. I sincerely hope that Professor de Ruggiero's health, which not long ago was not good, will be fully restored to him, both for his own enjoyment and to enable him to continue the large History of which the above are the first two volumes.

Eight volumes have so far appeared (the above two in a third edition, other three in a second), and as the next volume would take up the British line of thinkers its publication should be awaited here, all the more so as it is likely, I imagine, to be strongly critical of our traditional empiricism.

T. E. Jessop.

American Philosophy To-day and To-morrow. (New York: Lee Furman Inc. 1935. Pp. viii + 518. Price $3.75.)

In a certain sense this volume may be regarded as a "post-depression" supplement to *Contemporary American Philosophy: Personal Statements* (which appeared in 1930). The contributors, however, are different and most of them are rather younger. Again, it is more of a private venture than the earlier book, the present team of twenty-five contributors having been selected by the editors, H. M. Kallen and Sidney Hook, and not by any philosophical association. I do not suppose the writers were privately instructed to make it snappy, but the editors have obviously intended to make a special appeal to the reading public, for a large proportion of the contributors consists of journalists (at least half-time) and many have had very varied careers. Several sociologists, a literary free-lance, a State Senator, educational administrators, a negro (Oxford trained), a Cambridge man, a former engineer, a Catholic editor, a former engineer largely self-educated here join hands, or pens, with the more cloistered sort of philosophers. Each was instructed to "expound his attitude and outlook in terms of his personal development and take occasion to indicate what he regards as the most pressing problems of the future." Each was to be accounted "young," but for the purposes of this youthful round robin the "younger generation was regarded as a state of mind, not a chronological age." (The average age of those who have mentioned the date of their birth is forty-five, and the figure would not be lower if all the contributors had supplied this particular.)

These unchronologically youthful contributors have refreshingly different views. There is hardly a single important statement made by any one contributor that is not flatly contradicted by some other. So to-morrow may well be lively. The result, however, seems to me to be very successful, although I should advise readers to make successive dips into the book, as their inclination may direct, and not, as I did, to read it straight through. Twenty-five separate jewels seem to be more effective when scattered.

Among the topics treated are the advance from pragmatism to naturalism, the conquest of egoism and its invincibility, the superficiality of Karl Marx and the need for him in the twentieth century. There is not very much logistics (for Mr. Weiss is about to become a metaphysician) and hardly any New-world Hegelianism, although Mr. Sheldon clings to a fissured form of the Great Tradition. In one form or another, value-theory seems to be the topic most frequently recurring, and Mr. Koffka writes an interesting dialogue on the theme of "values-sub-n," that is to say on the general doctrine that the subjective values in this or the other subject reflect (or, even, *are*) the nisus towards pattern in his experience and that, metaphysically speaking, we have every right to interpret objective reality in terms of our own experiences—or, at any rate, no other hope. One of the most original essays is Mr. Schneider's, for he draws an important distinction between the ethics of contractualism and the ideal of communism, supplementing the distinction with the provocative thesis that "the basic power of the state is derived from the physical necessities of administering

certain types of goods, not from the pooled wills or energies of the citizens."

Not very much is said in detail about to-morrow.

JOHN LAIRD.

Where is Science Going? By MAX PLANCK. With a preface by ALBERT EINSTEIN. Translated and edited by JAMES MURPHY. (London: George Allen & Unwin, Ltd. 1933. Pp. 224. Price 7s. 6d. net.)

Atomic Theory and the Description of Nature. By NIELS BOHR. (Cambridge University Press. 1934. Pp. 119. Price 6s. net.)

Science and the Human Temperament. By ERWIN SCHRÖDINGER. Translated and with a biographical introduction by JAMES MURPHY. Foreword by LORD RUTHERFORD OF NELSON. (London: George Allen & Unwin, Ltd. 1935. Pp. 154. Price 7s. 6d. net.)

In these three books we have an interesting and stimulating account of the present state of the philosophy of the new physics, ill-defined and somewhat obscure as it is. And a point of significance is that Max Planck and Einstein, who were the originators of the whole quantum problem, are unwilling to accept the philosophy of indeterminism. Einstein calls it "objectionable nonsense" and Planck, discussing heat conduction, allows himself to say: "If it were possible for us to follow the movement of each individual molecule in this very intricate labyrinth of processes, then we should find in each case an exact fulfilment of dynamical laws" (p. 145); a declaration of faith for which he is taken to task by Sir Arthur Eddington, who asks: How does he know? But further on, on p. 190, Planck says: "It is now generally agreed that heat movement of molecules and conduction of heat, like all other irreversible phenomena, do not obey dynamical laws but statistical laws": so he seems to have it both ways, and the reader is left in complete bewilderment. Is this not a naïve use of the word *law*, long ago discarded, as something compelling physical objects to change their motions?

Planck, like Einstein, sees clearly that free-will is an illusion and puts forward a convincing argument to support this view: in this he differs from Bohr, who holds free-will to be an "experiential category of our psychic life." Planck, therefore, does not think that the philosophy of indeterminism is needed in order to account for human activity, whereas Bohr thinks that it may have some bearing on "the more profound biological problems, . . . in which we are concerned with the freedom and power of adaptation of the organism in its reaction to external stimuli. . . ."

Philosophers will be intrigued to find that the present state of physics has forced both Planck and Schrödinger to attempt to say what they mean by "really existing." In the past physicists have usually contrived to avoid any of the really difficult problems that arise when scientific method is applied to the external world, but now they are being forced, rather against their better judgment, to address themselves to epistemology. And philosophers must be indulgent if many of the views advanced appear to them naïve, and if, on examination, some of the ideas presented as new and startling, turn out to be much camouflaged versions of old and well-worn gambits, long known and long discarded.

Professor Schrödinger deals in a fascinating and entertaining manner with the connection between science, art, and play; the relation between theories in physical science and the general cultural views of the epoch; and the question: Is science a fashion of the times? It is interesting to notice how closely he approaches the Spenglerian view of the morphology of science.

All three books are a valuable contribution to the flux of ideas brought about by doubt and mistrust of earlier intuitive notions which form the unconscious background of all Gothic culture.

G. Burniston Brown.

Modern Thomistic Philosophy, Vol. I, *The Philosophy of Nature*. By R. P. Phillips, D.D., M.A. (London: Burns, Oates & Washbourne. 1934. Pp. xiv + 346. Price 9s.)

The aim and scope of this text-book, intended for students, is briefly set forth by Dr. Phillips in his Preface. "The purpose of this book is to present a simple explanation of the philosophy usually taught to Catholic students. . . . Since such teaching at the present day is predominantly on the lines of the system originated by S. Thomas Aquinas, it is this system, as developed by modern Thomists, which it is the object of this book to explain." According to this plan, the author does not attempt to give an account of the other Scholastic systems, such as those of Scotus and Suarez, except in so far as their divergencies of doctrine may throw light on the Thomist contentions. In the same way Dr. Phillips only pays attention to the principal divergencies of modern philosophies from Thomism, as "bringing into higher relief its positive teaching." He does, however, attempt to meet the more urgent of the reasons which have been advanced against its truth.

This first volume is entitled *The Philosophy of Nature*, and comprises what is called in Latin text-books of Scholastic philosophy "Cosmology and Rational Psychology," that is, the study of the material world in general according to the two great classes of material things, the inanimate and living ones. The next volume will be devoted to the study of Metaphysics.

The amount of philosophical ground covered in the present volume is immense and the number and importance of the topics treated debar any useful discussion within the limits of a review. The mere titles of some of the first chapters, Mechanism, Quantity, The Continuum, Place and Space, etc., indicate the difficult problems which are raised. I will therefore confine myself to a few general remarks.

Dr. Phillips is to be congratulated on the clear and lucid way he has set forth Thomist doctrines and especially for the manner in which he has rendered the Latin terminology of the Schoolmen in English, an achievement which makes his book very readable and interesting even for those unacquainted with the great treatises of the Schoolmen. It is easy to agree with the Jesuit Professor who recommends it as the best thing of its kind in English. This does not mean that one admits all the arguments put forward by Dr. Phillips. The average student who reflects, for instance, would hardly be convinced by the discussion which tends to prove that matter is the principle of individuation. Moreover, despite the fact that the author makes a laudable attempt to conciliate or incorporate modern theories into the Thomist system and is quite willing to admit that a modern presentation of Thomism must be different from that of a John of S. Thomas or of Goudin; nevertheless, his "Thomism" seems to me to be much too narrow. Thus, in the chapters on Cognition and on the Intellectual Life no mention is made of the work of men like Rousselot, Maréchal, and Romeyer, nor is any account taken of the fact that on their showing the terms "modern" and "Thomistic" would seem to be irreconcilable adjectives.

L. J. Walker.

Spinoza. By Sir Frederick Pollock. (London: Duckworth, 1936. Pp. 143. Price 2s.)

Anything that Sir Frederick Pollock writes about Spinoza is bound to be interesting, and this little book, in the "Great Lives" Series, though almost purely biographical, is full of pertinent detail about the philosopher, his spiritual environment, and his friends and correspondents. The author has utilized the results of the minute researches that have been made by scholars into these matters since his complete study of Spinoza (now out of print) was published some half a century ago. While he has deliberately ruled out any discussion of Spinoza's philosophy, place is given to the intellectual influences that helped to shape it. Among these influences, that of the Neo-Platonic tradition seems to us to have been unduly minimized. The treatment meted out by de Blyenbergh strikes us as over-harsh: the man was, of course, no philosopher, only a well-meaning amateur; but, as Guzzo has shown clearly in his able work on Spinoza, he raised an issue that Spinoza failed to meet. He saw that no solution of the problems of evil and of the moral life was possible on Spinoza's system. In the last chapter the author reviews the history of the Spinozistic legacy during the last 250 years, and closes with the address he gave as the representative of Oxford and Cambridge at the Tercentenary Celebrations at The Hague in 1932.

W. G. de Burgh.

An Introduction to Contemporary German Philosophy. By Werner Brock, Dr.Phil. (Cambridge, at the University Press. 1935. Pp. xx + 144. Price 6s. net.)

A book of this sort was needed. Since the War, philosophy, except in those parts of it that are closely allied to the more internationally minded sciences, has tended to be far too monoglot. More particularly, however, this book should make a special appeal to many readers of *Philosophy*, for it supplies a certain type of answer to the question that has been so much discussed recently in this journal, viz. whether the time has not come when academic philosophy should change its ways and attempt in some fashion to become a guide to life, the supporter and interpreter as well as the critic of the stuff of aspiration. Dr. Brock indicates the answer of certain contemporary German philosophers to this question—not an easy answer but, very likely, none the worse for that.

He does not try to tell us all about modern German philosophy. For that he refers his readers to Oesterreich's edition of Ueberweg. Instead, he tells us, compactly but not sketchily, the story of that part of contemporary German Philosophy in which he himself finds the greatest promise and the greatest interest. As he sees it, this movement of German thought was brought about by the breakdown of Hegelian idealism and the rise of positivism in the nineteenth century. The problem was to reach a new conception of philosophy which should define a genuine field of inquiry and yet be readily distinguishable from the natural sciences and from any encyclopaedia of them. Dr. Brock believes that Jaspers and Heidegger have come very near to success in this important enterprise.

Seen from this point of view, the work of Husserl, Dilthey, and even of Weber is regarded as preparatory. It was not enough with Husserl's followers, or with Dilthey and Weber, to attempt to penetrate into the ethos of the humanistic sciences and exhibit the non-normative character of the positive sciences. Nietzsche and Kierkegaard (in translation), according to Dr. Brock,

were of much greater importance because they prepared the way for the attempt of Jaspers and of Heidegger to "abandon the epistemological approach and start from a fundamental phenomenon—either 'Life' or 'Existenz'—which is perhaps deeper, certainly more realistic, although more impervious to analysis."

This story could hardly be told in shorter space than Dr. Brock has allowed himself. Consequently it seems sufficient here to remark that Dr. Brock's enthusiasm carries him through much difficult country, and stimulates much reflection among his readers, that he provides a very useful bibliography, and that Dr. Muirhead supplies a very good preface.

JOHN LAIRD.

Psycho-analysis and Social Psychology. By WILLIAM MCDOUGALL. (London: Methuen & Co. 1936. Pp. ix + 207. Price 7s. 6d. net.)

When the lectures embodied in this book were delivered at the University of London last year, they aroused some controversy. Some of McDougall's hearers were struck by the apparent inconsistency between McDougall's statement early in the lectures that "Freud has done more for the advancement of our understanding of human nature than any man since Aristotle," and the subsequent ruthless criticism of him. There is, of course, no inconsistency. McDougall's position in this book cannot be understood unless we bear in mind both that he thinks Freud a very great man and that he considers that Freud has made many mistakes.

Some of these mistakes McDougall considers that Freud is now correcting, and is thus drawing nearer to McDougall's own position, for example, in recognizing that there may be many human inborn propensities which are not merely forms of the sex instinct. That Freud, when he advanced into the field of social psychology, did not relate his work with that of McDougall is, of course, true. It is part of the truth that his work shows almost no sign of having been influenced in any way at all by more than two or three contemporary investigations in social psychology or anthropology. Such intellectual isolation may have some advantages for an original thinker, but it has the serious disadvantage of preventing his work from taking its place in the integrated and ordered advance of scientific knowledge.

McDougall has little difficulty in supporting the charge of inconsistency and lack of logical coherence in much of Freud's theorizing. The truth is, I think, that Freud has no gift for the logical side of scientific speculation. He is an intuitive genius who is often right in conclusions supported by reasoning which could be demolished by a student in his first term in a logic class. If this is admitted, there is little interest in analysing his inconsistencies. Such analysis does not affect the real importance of his work; this is based on his observations and not on his reasonings.

One of the objects of McDougall's attack is the 'Oedipus complex.' This a misleading and prejudice-creating term, not always very clearly used. But the question of whether or not there is a strong emotional attachment of the child to the parent of opposite sex before the fifth year which has lasting effects on later character development is a different and much more important question than the use of a particular term to describe it. Also it is a question which must be settled by controlled observation and not by discussion. The fact itself may be true and important even though the term used to describe it is a bad one, and though some of the conclusions drawn from speculations about the Oedipus complex may be indefensible.

We may liken Freud to an explorer who, having discovered a new country,

and knowing nothing about map making, comes back with a sketch map which uses none of the usual conventional signs and lacks self-consistency. The cartographers criticize the deficiency of his map, as they should, since that is their business. But there is danger that they may lead us into thinking that the deficiencies of the map are, in themselves, evidence that the country does not exist or that it is not better represented by the imperfect map than by no map at all. The imperfections of the map may make it difficult to be sure of how much of the country has been correctly surveyed and how it is related to previously known country. Let us then make better maps with better surveying methods.

At the present time, there has been more speculation on the subject of social psychology than exact research. So long as this is the case, there will be difference of opinion. In the course of the next hundred years (if civilization lasts so long) we may hope that the position will be changed. Many of the questions now in dispute will have been settled by scientific inquiry, many will have been relegated to the lumber-room as meaningless problems. Freud has posed many problems which the experimental investigator should set himself the task of solving, although Freud himself seems little interested in the problem of how his statements could be scientifically verified or disproved.

Freud says, for example, that the feeling of affection results from 'aim-inhibited' sexual needs; McDougall denies this and says that it is the impulse of an independent instinct. It is unlikely that argument will settle this question. The scientific social psychologist will ask what (if any) experiment or controlled observation will give a different result if Freud's and if McDougall's theory is true. If none, it must go to the speculative lumber-room. It is not unlikely that many of Freud's ingenious suggestions will find their way there, but I believe that enough will be left to make sure that Freud will be remembered as one of the very important explorers of the human mind.

R. H. Thouless.

The World of Colour. By David Katz, Dr.Phil. Translated by R. B. MacLeod and C. W. Fox. (London: Kegan Paul, Trench, Trübner & Co., Ltd. 1935. Pp. xvi + 300. Price 15s.)

While based primarily upon the author's own researches, his appeal to the results obtained by other workers in this field is so full that he has provided a valuable handbook to modern theories of colour vision. The translation, which slightly abbreviates the German original, appears to be excellent. The book is too closely packed with information to be easy reading, and for the same reason it is impossible to give an adequate summary. It is a book to be closely studied by the specialist, and an indispensable work of reference for all psychologists. The artist, too, will find in it more to interest him than he has been offered in the traditional treatment of the subject.

The salient feature of the modern theories represented in Dr. Katz's statement is that a strictly psychological standpoint is adopted, and the older dependence upon physics and physiology abandoned. No doubt science must ultimately reconcile the three points of view, and we do not understand the author to contend that the phenomena which he discusses are without physical basis. But it is clear that a theory of atomic sensations invariably related to physical stimuli will not account for the common facts of visual perception. To explain away as illusions all the facts which disturb the simple sensationist scheme is too facile, and this method has stultified theories of

perception for too long. Illusions remain facts to be studied in their context. Even to term them illusions is to beg an important question. This book has the merit of treating such phenomena seriously. The "world of colour" treated by Katz is that of common experience, a world in which colours are sometimes attached to surfaces, subordinate to them and localized, sometimes spread through the third dimension, as in a translucent coloured liquid, and at other times seen as "film-colours," as is the colour of my lamp-shade. It is a world in which we observe coloured surfaces retaining their colours while the physical conditions alter, white remaining white when physically reflecting less light than a better illuminated black. We are aware of the illuminant as well as of the illuminated. These are some of the phenomena which are submitted to experimental investigation.

The conclusions reached are in agreement with those of the Gestalt school. The qualities of any part of an experiential field are dependent upon the whole field. The general principle is stated with great precision in detailed instances. The quantitative results are in some cases precarious, since based upon very few observations. It may be, however, that the author intends the data offered only as illustrative of that which he obtained, and those who feel misgivings can repeat the simple experiments which are so adequately described. Similarly those readers who are disappointed to find that the "colours" discussed are for the most part those in the black-white series may be encouraged to extend the author's work. The whole book is too valuable for small criticisms.

A. W. Wolters.

The Rise of European Liberalism. By H. J. Laski. (London: George Allen & Unwin, Ltd. 1936. Pp. 287. Price 7s. 6d. net.)

"For, as I have here sought to show, the liberals of the epochs before the French Revolution had only a negative theory of the state; to them, for quite intelligible reasons, it was a tyranny from which they sought an escape. After their victory, they saw it either as a means of protecting themselves from invasion from below, or as, somewhat later, a technique for distributing such concessions to those who challenged their supremacy as might enable them to maintain it unchanged in its larger outlines. To the demand for justice they replied by the offer of charity. This, no doubt, is an unfair description of the more generous minds amongst them. . . . But it is not unfair as an account of the evolution of the doctrine as a whole, and, particularly, of its expression as a social environment, on the one hand, and a body of legislation on the other" (p. 259).

Such, in Professor Laski's own words, is a fair summary of the thesis he expounds in this book. He describes it as "an essay in interpretation," and an essay in Marxist interpretation of history it undoubtedly is. As the quotation shows, it suffers from the defect of all Marxist interpretation—excessive and unreal simplification. It assumes the existence of a class of "liberals"—by which Professor Laski means merely bourgeois capitalists—sufficiently class-conscious and sufficiently continuous over a period of four centuries to use the mechanism of the state for such definite purposes. He insists that "the fundamental aim" of the liberal state has been "to serve the owners of property"; though if this is true of the liberal state, surely it would be even more true of the Greek city-state and the political structure of feudalism, and would not be peculiar to liberalism. Surely, in its effort to escape from

the "tyranny" of the state—of that feudal state which *had* been constructed to "serve the owners of property"—liberal thought evolved concepts which made it logically impossible to limit politics to such an end. Professor Laski writes as if he were pronouncing a funeral oration over the grave of liberalism. I do not believe that the full implications of its ideas have yet been worked out in theory or in practice; and I am not sure but that Professor Laski, with his passion for individual justice, is the strongest evidence for that belief. He seems to deny that any disinterested desire for individual justice belongs to liberal thought and quotes its attitude to the poor, to the rise of trade unionism and to decent standards of education, health, and housing as proofs of this denial; but surely much of the opposition in each case was simply the slowness of human nature to readjust itself to new ideas, the sheer inertia of habit and tradition; and in so far as there was an urge to reform, and these reforms were actually achieved, it is the principles of liberalism which were responsible. To show that individual liberals resisted such change *at the time* is only to show that the leaven of liberalism took time to produce its results. That such change was effected and accepted marks the evolution and the triumph of true liberalism.

Professor Laski is concerned to show that all "liberal" thinkers in the sixteenth, seventeenth, and eighteenth centuries in France and England kept intact the principle of private property; though I would not have thought that elaborate research were needed to prove that; what is much more necessary is proof that *because of* this retention of private property all the political motives of men were conditioned primarily by profit-making and self-interest. Surely it is this second link in the argument of materialist interpretation which needs most adequate proof; yet this is, on the whole, assumed. Refer to clearly disinterested thinkers—the author himself mentions T. H. Green, Tocqueville, and Hobhouse—and the materialist seeks refuge in "evolution of the doctrine as a whole," and "its expression as a social environment." But economic determinism means one of two things: if it only means that the intellectual life of an age is "conditioned" by its social and economic structure, in the sense that this structure postulates the general environment and the outside framework of contemporary ideas, then I have little fundamental quarrel with it. One might differ as to how far economic considerations were the chief conditioning factor, how far only one amongst several others. But if economic determinism means that the economic structure of society determines its thought in detail, so that the institution of private property involves the inevitable and complete exclusion of any terms of reference other than the self-interest—however enlightened—of the ruling class, then I have a very great quarrel with it. For I believe it to be quite untrue.

Professor Laski seems to swing between these two poles. Thus he begins by arguing that liberalism was not a conscious and persistent pursuit of the ends of freedom from government control, free association, and so on, but rather that "these were the ends its more ultimate purposes caused it to serve." He maintains that toleration comes "because, at bottom, persecution is a threat to property." The idea of toleration may be urged by some for genuinely religious reasons; but the idea is only materialized into political institutions when a congenial social environment has been created by economic and material considerations. It is a subtle and often elusive argument. Of course, every historical change is caused by a conjunction of congenial circumstances. But that does not prove that the material circumstances are all-important; it shows that every circumstance is vital, in the sense that the result would have been different for the absence of any single one of them. And materialist

interpretation is simply a foreshortening of the complex truth of the historical process.

The author swings to the other pole when he writes, cryptically, "Tolerance came because intolerance interfered with the access to wealth." I believe that there was an inherent logic in liberalism which drove it to toleration, as an intellectual necessity, in the course of the historical process. I would be glad to make some estimate of the part played in this process by both selfish motives and by economic environment; but I would not start by assuming the supremacy of material factors. Again, the new outlook of Newton's *Principia* is said to have "emerged from a nexus of problems presented to science by business men." I believe that there is an inherent logic of development in science, which would have developed—perhaps slower or faster—regardless of the problems of business men at any given period. Nineteenth-century science is more the product of the liberalism of free inquiry than of the liberalism of capitalist business.

In other respects, it may be that the book is in danger of falling between two stools. Having warned the reader that it is but an essay, and that much more detailed analysis would be required for adequacy, Professor Laski proceeds to pour over him such a flood of erudition as may well submerge the general reader; notes for the specialist student are collected at the end, but so many specialized references are made in the body of the text that mere freedom from footnotes can be but cold comfort to the general reader. Amidst this wealth of detail, one is disappointed to find not a single reference to so important and relevant a name as Bolingbroke. Surely, that appeal from the 'new whigs' of his own day to the 'old whigs' of 1688, that insistence that the general liberal maxims of the Bill of Rights are ineffective until supplemented by legal securities, that programme of radical reforms which foreshadowed Fox (in fact, the whole "Dissertation on Parties"), have much more potential relevance to the theme of the book than even Dr. John Brown, Ogilvie, and Wallace, who are quoted with such zest.

Of minor matters, a misprint of "state" for "statute" on page 150 makes nonsense of a quotation from Thomas Mun. (Incidentally, need we be given the page-reference to the 1664 edition of Mun, when the 1928 edition is readily obtainable?) Verbally, if not physically, "impact" loses force by repetition; and "the impact of the equilibrium which emerged" on page 140 hurls us into the arms of Mr. A. P. Herbert.

DAVID THOMSON.

Race, Sex and Environment: A Study of Mineral Deficiency in Human Evolution. By J. R. DE LA H. MARETT. (London: Hutchinson & Co. 1936. Pp. 342. Price 21s.)

The infinite diversity of human types and cultural development has always been a fascinating subject for speculation. In our search for the why and the how of the so-called "racial" differences we have looked to the biologist, the sociologist, and the student of geography in turn, but each new development of scientific knowledge seems only to show more clearly the complexity of the problem. Those three variables, culture, environment, and innate endowment, still remain, and we are as far as ever from solving the set of equations that link the three. The discovery of the Mendelian principles of inheritance seemed to point to one answer, the psychology of the Behaviourist school to another, while researches on the influence of diet on human develop-

ment, and the action of the endocrine organs on physique and temperament brought other possible solutions in view. In *Race, Sex and Environment* Mr. Marett makes another, and it must be stated at once a very courageous, attempt, to account for the variations in human races and types.

According to his theory, put very crudely, we are, we think, and we act according to the mineral constituents of the soil on which we live. The effect of certain mineral deficiencies, notably a shortage of iodine, calcium, and phosphorus, on the physique or endocrine balance of the human individual has long been known to physiologists, and it is on this fact that Mr. Marett builds his theory of race, mapping in an interesting fashion the distribution of the various mineral constituents of the soil over the habitable globe, and then applying the knowledge of genetics he gained through breeding experiments on Jersey cattle to the study of the evolution of human types in different environments and climatic conditions.

In stressing the importance of mineral deficiency in human evolution, Mr. Marett has outlined an exceedingly interesting problem. He shows boldness, originality, and very wide reading. Unfortunately, however, in this particular work he covers so large a field that he is compelled almost immediately to leave the realm of established scientific facts. He ranges in time from the pre-glacial epochs through various imagined evolutionary stages to the present day. In space he covers the whole surface of the earth, and deals with every type of people, from the primitive Bushman to the modern city-dweller. And of the human variations which he believes to be dependent on mineral deficiency he treats, not only those physical characteristics such as stature, skin colouring, skull form, etc., usually made the basis of ethnic classification, but as distinctive features evolving similarly under the influence of natural selection peculiarities of the human psyche and the typical mental conflicts described by Freud. These latter he believes to be reflected in the social institutions of different ethnic groups, their political organization, economic institutions, and religious ceremonial. With such an ambitious programme it is not surprising that the author has to draw largely on imaginary reconstructions of the past, and the reader must confess to feeling slightly breathless as hypothesis is piled on hypothesis, and Mr. Marett ejaculates continually, "It is probable," "It is not impossible," or "It can be readily imagined that." Moreover, though adventurers in the No Man's land between biology, anthropology, and psychology are welcome, we feel not unreasonably bewildered at the simultaneous use of the jargon of all three sciences. When the author describes the evolution in arid surroundings of dolichocephalic pastoralists with exteriorized super-egos and a ritual of Sky-God worship, we seem to be moving in a many-dimensional world, although it must be admitted that the appended glossary defines for us realities as diverse as acromegaly, *rites de passage*, and auto-erotism.

To comment in detail on every theoretical issue raised in these three hundred closely printed pages would be impossible. The biologist must examine Mr. Marett's application of the laws of heredity to the historical reconstruction of racial evolution, and his conception of the effects of mineral deficiency on selection for relative degrees of sex-linked predominance, a point on which he lays great stress. The geologist, the archaeologist, and the psychologist will also have their say. The present review must confine itself to the sociological issue alone. Here Mr. Marett's main contention seems to be that the human psyche is the product of certain environmental conditions, and that the terms used to describe individual types can be applied with little modification to racial groups. Even such Freudian concepts as the "id" and the "super-ego," degrees of inversion, or conflicts such as the Oedipus complex, are described as charac-

teristic of different ethnic groupings and treated as though evolving through natural selection according to biological laws. It is the psyche of different races, divided by Marett into masculine and feminine types, which account for their characteristic social institutions, and hence the author attempts to account for polyandry ultimately in terms of iodine deficiency; shamanistic religions as the product of an over-burdening of the heat-producing powers of the anterior lobe of the thyroid; and the domestication of animals in human history as due to mineral deficiencies encouraging an inhibition of the aggressive instinct in man and beast, thus facilitating co-operative symbiosis! Such hypotheses are too startling to be tested by the laws of human society as we know them. Mr. Marett's book must in fact be regarded as a stimulating excursion through imaginary epochs and spaces and what he calls "psychological imponderables." "Truth," as he himself explains, "to a man of a masculine race absorbing a sufficiency of minerals and expressing his utosomal instincts of self-assertion, consists in no doctrine but rather an adventure."

A. I. RICHARDS.

Faithful Rebels. A Study in Jewish Speculative Thought. By ISRAEL LEVINE, M.A., D.Litt. (London: Soncino Press. 1936. Pp. viii + 146. Price 6s.)

The fourth-century author of the Book of Job, probably under foreign influence, rebels against the Prophets and ruthlessly faces the problem of suffering and the scepticism to which it gives rise, but in the end returns to acceptance of the Hebrew faith in God omnipotent and inscrutable. The same is the fate of the second-century writer of Ecclesiastes after an uncompromising adoption of the Stoic and Epicurean standpoints. Philo, a contemporary of Jesus, uses Greek philosophy, and especially Platonism, only to establish Jewish monotheism and monism, just as in the twelfth century A.D. Maimonides uses Aristotle to uphold as correlatives the unity of Nature and the unity of God. In the seventeenth century Spinoza sets forth a monism making for materialism with an unprecedented thoroughness, disallows the freedom of the will, and exempts nothing from the geometric method, and yet his motive is ethical, and he is God-intoxicated. In the nineteenth century Marx is a Spinoza in economics; in our own days, in spite of his opposition to religion, he has become in Russia the founder of a veritable faith and the prophet of a new social order. Bergson, our contemporary, philosophizes only to depose reason and enthrone intuition and thus mysticism; he reproduces many features of Philo and Spinoza. All of these rebel against, or at least adventure away from the Jewish culture (for philosophy itself is alien to it); yet in so doing they manifest the Jewish characteristics of thoroughness, realism or materialism, and ethical or prophetic provocativeness, and in their very atheism testify to religious faith, which is the sole bond of union between Jews.

Such is Mr. Levine's thesis. His little book is by its simplicity and conciseness admirably qualified for the general reader. But it suffers from oversimplification. Thus, the antithesis between Hebrew faith and Greek "science" is made absolute through neglecting the mystical element of Plato's *Republic*, and the really philosophical problem of the monism of some of the above writers which leans now to atheism, now to acosmism, is never raised. Again, only the derivative nature of Mr. Levine's essay would seem to explain his failure to use Bergson's *Les deux sources de la morale et de la réligion*, as yet unassimilated by the commentators. His general contention, however, I should like not merely to support, but to express even more strongly than he. The peculiarity of Israel is not simply faith, but the development of a discipline for practising *en masse* the constant presence of God ("and thou shalt talk of

them when thou sittest in thine house, and when thou walkest by the way, and when thou liest down, and when thou risest up"), and for forming a people of priests. From centuries of this practice come its singleness, its realism (for God is real, living, drastic), and its intense energy and activism. But take away God, the correlate of that energy, and you have materialism, a force *détraqué* and disproportionate to its task, and in all cases, as in some of the above writers, witness (sometimes monstrous) to the *absence* of God. Herein lies the explanation both of the achievements and of the pathology of Israel. Its experiment is unique except for the nascent parallel of the Oxford Group, which should be studied by all interested in the history and destiny of the Jewish people.

PHILIP LEON.

The Hallucinations of Logocratia. By TELEMACHUS KOURMOULIS. (Athens: "Kyklos." 1936. Pp. 243.)

We have here a gallant Don Quixote, officer in the Hellenic Navy, tilting at many isms, in all of which he sees logocracy, that is, "all the philosophical systems hitherto known," which take sense-experience as the origin of cognition. With two exceptions: the philosophy of Herakleitos and of the Buddha. He holds that these two placed beside the empirical origin of their world-view "that true and unique support which Creation has instinctively (*sic*) laid within our psychical energy." "This instinctive support within us is represented by three meanings . . . not given by sense-experience, but appearing in our conscience (*sic*), and are imposed upon us . . . through the so-called direct way of Psychical Facts." These meanings, which he also calls "instinct data," are not easy to run to earth. But on pp. 166–171 they appear as "non-freedom of will," "existence of the external world," and "finiteness of the Whole."

Don Quixotes have my lively sympathy—nay, I should rather call them Irredentists, for they may oftener foreshadow the "futures" in thought than a wasted championship of the outgrown. And I should willingly have tried further exposition had space been here possible; yet am I not sorry that it may not be. For the author is his own worst enemy. Not because he has had the courage to cope with an alien tongue, in which he is, if fluent—so much too fluent!—not thoroughly at home (e.g. he persistently uses *à la française*, "conscience" for "consciousness"), but because (*a*) he has marred his work by wordiness; (*b*) has presented, as the "philosophy" of the Founder of Buddhism, his own misconstructions of a few contexts selected at random from Pali Suttas—such misconstructions as great Gotama would have been the first to repudiate as representing what he saw as real and true.

I am much implicated herein, for the author pleads that he has "carefully gathered" such sayings, but betrays he owes them to the perusal of Greek translations of Mr. F. Koehler's *Hinduismus und Christentum* and Mrs. Rhys Davids's *Buddhism*. I do not know what the former writer may have committed himself to about Buddhism, but as to the apparently pirated edition of my own book I can say thus much: (i) I have not misquoted sayings ascribed to "the Buddha," as is, e.g., the case on pp. 41 and 197; (ii) I have in no instance read into any such sayings the interpretations offered by the author; (iii) I regret that he has been incurious to inquire whether the immature first edition of 1912, which has apparently been illegitimately translated, may not have been replaced by later maturer editions.

C. A. F. RHYS DAVIDS.

The Doctrine of the Sūfīs (*Kitāb al-Ta'arruf*). Translated from the Arabic of Abŭ Bakr al-Kalābādhī by A. J. Arberry, M.A. (London: Cambridge University Press, 1935. Pp. xviii + 173. Price 10s. 6d.)

This excellent translation—a worthy companion to Mr. Arberry's edition of the text (Cairo, 1934)—will be welcomed by all interested in Sūfism, especially as it provides the only complete version at present available of any early Arabic manual of the same kind; for the well-known works of Sarrāj, Makkī, and Kushairī are more or less "sealed" to those who cannot read them in the original language. Here we find no far-reaching speculations concerning the real nature of man as the microcosm in which God is reflected. The subject-matter of all these treatises (*circa* A.D. 1000–1050) is closely akin to the doctrine and experience of medieval Catholic mysticism, and includes little that might not be regarded as a legitimate, though one-sided, development of Qur'ānic ideas. Kalābādhī, perhaps suspected on account of his connections with the arch-heretic, Hallāj, is careful to demonstrate his own orthodoxy; and, like Kushairī fifty years later, he cites the great Sūfīs of the past on almost every page in order to justify his contention that the uncorrupted Sūfī doctrine is in perfect harmony with Islam: the unquestionable influences of Christianity and Hellenism he naturally ignores. His *résumé* of mystical theology, psychology, and ethics serves to bring out the salient points which a more detailed exposition would have obscured, and the illustrative material, together with the author's explanations and critical remarks, is of first-class importance. This book, it may be hoped, will do something towards dispelling the view, endorsed by at least one famous English theologian, that few Sūfīs are devout Moslems, or even respectable members of society. The whole work, and in particular the poems scattered through it and admirably rendered into verse by the translator, bear witness to a sincere piety and deep religious feeling which is neither pantheistic nor antinomian.

R. A. Nicholson.

Human Ecology.By J. W. Bews, M.A., D.Sc., Principal of the Natal University College, Pietermaritzburg. With an Introduction by General The Rt. Hon. J. C. Smuts, P.C., C.H., F.R.S. (Oxford: University Press. London: Humphrey Milford, 1935. Pp. xii + 312. Price 15s. net.)

According to the author of this book, ecology is the most important and fundamental of the human sciences, since it unifies them all and "enables each one to find its proper place in a generalized study of man" (p. 14). In human affairs as elsewhere its subject-matter is the triad of environment, function and organism; and its aim is to study these three things in relation to one another. But this is much more difficult in human affairs than elsewhere, for the double reason that there are numerous separate sciences dealing with the different members of the triad and that the first and most important member is not fixed by nature but extensively modified by human activity. Professor Bews is well aware of these (and other) difficulties; and accordingly his book, with the exception of the final chapter, is devoted to summarizing the relevant results of the sciences in question, the greater bulk of it being (as might be expected) concerned with anthropology. It is doubtful, however, if there is much value in an inevitably compressed summary of so many sciences, conducted without any unifying idea other than that it is desirable that they should be unified; and it is perhaps regrettable that the philosophy of history should find no place amongst them, especially in view of the fact

that ecology is regarded as a philosophy as well as a science and an art (p. 300). Nor does the synthesis which is offered in the last chapter do much more than point to examples of ecological inquiry (such as regional surveys), refer to the work of Marston as an example of an ecological psychology, and show some ways in which ecological considerations affect our enjoyment of works of art. There are also some unfortunate misprints.

O. DE SELINCOURT.

Books received also:—

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R. Matthews. *English Messiahs. Studies of Six English Religious Pretenders.* 1656–1927. London: Methuen & Co. 1936. Pp. xvi + 230. 10s. 6d.

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SPINOZA MEMORIALS IN HOLLAND

Sometimes a prophet is not without honour in his own country, although he may have to wait a century or two before he receives it. Spinoza, driven out of the Jewish community into which he had been born, his opinions condemned by the general voice of Holland, obliged to withhold during his lifetime the publication of his greatest book, his memory reviled for generations after his death—Spinoza is now venerated as one of the spiritual heroes both of the race from which he sprang and of the country of which he was a citizen.

Having occasion recently to be in Holland, I paid visits of piety to the two houses in which Spinoza lived and which are now maintained as memorials. Some of the readers of *Philosophy* may perhaps be interested to hear about them.

In the village of Rijnsburg, a few miles from Leyden, Spinoza found a refuge when, as a young man of twenty-eight or twenty-nine, he felt compelled to leave Amsterdam. The village was a centre of the sect of Remonstrants, to which the friend who had harboured him belonged; it offered a safe and congenial home for a man of Spinoza's unconventional opinions. Off the main road stands the red-brick, red-tiled single-storey house, in which Spinoza lived from 1660 or 1661 to 1664. It has been acquired, and is now well maintained, by a Dutch society of Spinozists. In the principal room is a small but noteworthy collection of books by Spinoza and his contemporaries; on the walls are a number of portraits. Of even greater interest, in the room adjoining are to be seen the large wooden lathe and other tools which Spinoza used in his handicraft of maker of lenses. On the outside wall of the house a tablet has been inserted with a quotation from an old Dutch poet, of which this is a rough translation:

> Ah! were all men wise
> And striving to do well,
> This earth would be a Paradise
> That's mostly now a Hell.

The house in which Spinoza had spent his youth in Amsterdam, and that in which he first lived when he moved from Rijnsburg to The Hague, have not been preserved; but the one at The Hague which he afterwards occupied, from 1670 to his death in 1677, was bought by the Domus Spinozana Foundation in 1926. It is kept up by them as a memorial museum and meeting place.

The house is a large three-storied building, situated in a broad street. Across the way are some beautiful seventeenth-century almshouses, which Spinoza used often to visit. Between the two is a fine bronze statue, erected in 1880, of the seated figure of Spinoza. Not far away is a great church surrounded by a burial-ground long disused. There Spinoza was buried. The only stone now in the churchyard is one placed there in recent years to his memory.

The two lower floors of the house were occupied in his day by a painter and decorator. The ground floor now accommodates a large conference room, where the Societas Spinozana of The Hague and other philosophical societies hold their meetings; there is also a considerable library for the use

of their members and of students. The first floor is the museum, with a large collection of objects of interest, including some autograph letters in Latin and in Dutch, and a number of portraits. The top floor, where Spinoza lived, is now a single, large, empty loft, with a small room boarded off. This little attic was the one room of his own. Nothing of the contents now remains.

But it is a great thing that the house itself should have been preserved, and should now be admirably maintained as a place both of study and of pilgrimage. All those, in every country, who love Spinoza as a man and set high value upon his work, will be deeply grateful to the friends of philosophy in Holland, who have recognized the duty, and have fulfilled it, of rescuing from destruction or oblivion this home at The Hague, and the other at Rijnsburg, of one of the greatest of thinkers.

HERBERT SAMUEL.

CORRESPONDENCE

To the Editor of *Philosophy*

Sir,

I do not think that discussions about reviews of books are often very edifying, but Professor H. A. Wolfson's remarks in the April number about my review of his *The Philosophy of Spinoza* appear to call for brief reply.

It is, perhaps, characteristic of the scholastic mode of approach favoured by Mr. Wolfson to rest content with lists of rival authorities rather than to attack problems directly. He may take it as additional evidence of my "supreme faith in (my) own convictions" if I say that I might have reached my conclusion about geometrical proofs being non-syllogistic even if Mr. Joseph had not written his invaluable book from which Mr. Wolfson seems to suppose I must have derived it. Mother-wit and simple examination of the facts will often carry one much further than reliance upon authority. After all, someone must discover truths, and thus do without an authority; and some truths are so obvious as to be constantly rediscovered by new inquirers. "Aristotle was certainly a knowing man, but nobody ever thought him so because he blindly embraced and confidently vented the opinions of another."

If I might, without offence, be brief and brutal, I should argue thus: Geometrical proofs are conclusive, and their conclusions are A-propositions predicting *specific* propria. Now A-propositions can only be conclusively established syllogistically by the mood Barbara. But Barbara proves only *generic* propria (as the *dictum de omni* emphasizes). Hence geometrical propositions are not established by means of syllogisms.

Yours, etc.,

H. F. Hallett.

University of London King's College,
Strand, W.C.2.
April 2, 1936.

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THE BRITISH INSTITUTE OF PHILOSOPHY

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